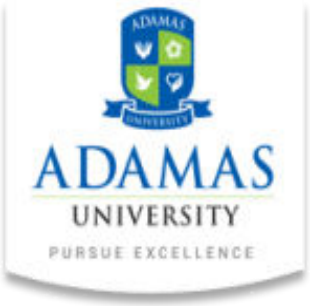


ADAMAS UNIVERSITY

SCHOOL OF BUSINESS & ECONOMICS

DEPARTMENT OF MANAGEMENT

PROGRAMME STRUCTURE & SYLLABUS

For

BACHELOR OF BUSINESS ADMINISTRATION

(BUSINESS ANALYTICS)

3 Years Programme

Academic Year - 2021-22

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF BUSINESS & ECONOMICS
DEPARTMENT OF MANAGEMENT

VISION OF THE UNIVERSITY

To be an internationally recognized university through excellence in inter-disciplinary education, research and innovation, preparing socially responsible well-grounded individuals contributing to nation building.

MISSION STATEMENTS OF THE UNIVERSITY

M.S 01: Improve employability through futuristic curriculum and progressive pedagogy with cutting-edge technology

M.S 02: Foster outcomes based education system for continuous improvement in education, research and all allied activities

M.S 03: Instill the notion of lifelong learning through culture of research and innovation

M.S 04: Collaborate with industries, research centres and professional bodies to stay relevant and up-to-date

M.S 05: Inculcate ethical principles and develop understanding of environmental and social realities

CHANCELLOR / VICE CHANCELLOR

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF BUSINESS & ECONOMICS
DEPARTMENT OF MANAGEMENT

VISION OF THE SCHOOL

To be a new-age school maintaining international standards of industry-relevant interdisciplinary education and research in the field of business, commerce and economics, developing professionals adept at leveraging technology, and conscious of society and environment.

MISSION STATEMENTS OF THE SCHOOL

M.S 01: Focus on outcome based curriculum enabling intellectual, personal and professional growth through life-long learning.

M.S 02: Integrate theory with practice to create solutions, embracing sustainability and diversity

M.S 03: Inculcate trans-disciplinary culture through teaching and research in emerging areas.

M.S 04: Encourage students to inculcate entrepreneurial spirit, ethical and societal values, and contribute to nation-building.

DEAN / SCHOOL CONCERNED

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF BUSINESS & ECONOMICS
DEPARTMENT OF MANAGEMENT

VISION OF THE DEPARTMENT

To be an internationally recognized centre for management education through excellence in pedagogy, research and innovation, preparing socially responsible and industry-ready management professionals who will emerge as the preferred choice for organisations.

MISSION STATEMENTS OF THE DEPARTMENT

M.S 01: Improve employability through progressive, outcome based pedagogy and regular interaction with industry for lifelong learning.

M.S 02: Integrate theoretical knowledge with real-life practices through industry interface.

M.S 03: Holistic development through trans-disciplinary teaching and research in emerging areas leveraging technology.

M.S 04: Encourage students to inculcate entrepreneurial spirit, ethical, societal and professional values, and contribute to nation-building.

HOD **DEAN / SCHOOL CONCERNED**

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF BUSINESS & ECONOMICS
DEPARTMENT OF MANAGEMENT

Name of the Programme: Bachelor of Business Administration (Hons)

PROGRAMME EDUCATIONAL OBJECTIVES (PEO)

PEO 01: Imparting knowledge of the fundamentals of Management theory and its applications in problem solving.

PEO 02: Developing expertise in the areas of leadership, interpersonal skills, entrepreneurship, finance, and marketing.

PEO 03: Enhancing professional competency in meeting the challenges of a globalized world of business.

PEO 04: Developing ethical, social and environmental consciousness.

PEO 05: Inculcating fundamental concepts and skills of research in various fields of business.

HOD **DEAN / SCHOOL CONCERNED**

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF BUSINESS & ECONOMICS
DEPARTMENT OF MANAGEMENT

Name of the Programme: Bachelor of Business Administration (Hons)

GRADUATE ATTRIBUTE / PROGRAMME OUTCOME (PO)

GA 01 / PO 01: Management Knowledge- Understanding of basic knowledge in the different fields of business & management in terms of concepts and principles.

GA 02 / PO 02: Problem Solution: Identify, formulate and analyze business problems utilizing knowledge of multiple disciplines including economics, statistics, commerce, law and technology and solve such problems using appropriate methodology culled from various fields.

GA 03 / PO 03: Leadership and Organization Skills- Develop strategic, organizational, and leadership skills for new organizations paradigm.

GA 04 / PO 04: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the business practices.

GA 05 / PO 05: Environment and Sustainability- Understand the impact of the professionals in societal contexts, and demonstrate the knowledge of, and need for sustainable development

GA 06 / PO 06: Life-long Learning- Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of business world.

GA 07 / PO 07: Creativity and Innovation- Develop inquisitive and innovative minds trained in the concepts of research and innovative practices.

HOD **DEAN / SCHOOL CONCERNED**

ADAMAS UNIVERSITY, KOLKATA
SCHOOL OF BUSINESS & ECONOMICS
DEPARTMENT OF MANAGEMENT

Name of the Programme: Bachelor of Business Administration (Hons)

PROGRAMME SPECIFIC OUTCOME (PSO)

PSO 01: Prepare basic knowledge, skills, tools and techniques to enable them to take up higher studies and research.

PSO 02: Development of entrepreneurial skills and spirit.

PSO 03: Develop competencies to be socially responsible business professionals.

HOD **DEAN / SCHOOL CONCERNED**

Programme Structure for BBA (Business Analytics)

(Industry Specific, Job Oriented, Skill based Programme)

SEMESTER	DURATION	No. of Credits	Examination Months
I	July - Dec.	24	December
II	Jan. – June	29	May
III	July - Dec.	29	December
IV	Jan. – June	26	May
V	July - Dec.	22	December
VI	Jan. – June	18	May
Personal & Professional Skills Development (PPSD); Participation in Co-curricular & Extracurricular activities through membership and active involvement in Gymkhana		--	--
TOTAL		148	

SEMESTER-I						
Type of Course	Course Code	Title of the Course	Contact Hours			Credit
			L	T	P	
AECC	ENG11051	Business English - I	2	0	0	2
Core	MGT11002	Business Environment	2	0	0	2
Core	MGT11001	Principles of Management	3	1	0	4
Core	MTH11514	Business Mathematics	3	1	0	4
Core	ECO11003	Micro Economics	3	1	0	4
Core	FAC11003	Principles of Accounting	3	1	0	4
SEC	DGS11001	Design Thinking	2	0	0	2
Core	BAN11003	Concepts of Data Structure and Database Management	2	0	0	2
			Total			24

SEMESTER-II						
Sl. No.	Course Code	Title of the Course	Contact Hours			Credit
			L	T	P	
AECC	ENG11052	Business English - II	2	0	0	2
AECC	EVS11109	Environment Studies	2	0	0	2
Core	SDS11503	Business Statistics	3	1	0	4
Core	ECO11501	Macro Economics	3	1	0	4
Core	FAC11005	Financial Accounting	3	1	0	4
Core	OBH11002	Behavioral Science	3	1	0	4
SEC	EIC11001	Venture Ideation	2	0	0	2

Core	LWJ11014	Business Law	3	1	0	4
Core	BAN13002	SQL	1	0	2	2
			Total			**29**

SEMESTER-III						
Sl. No.	**Course Code**	**Title of the Course**	**Contact Hours**			**Credit**
			L	**T**	**P**	
AECC	SOC14100	Community Services	0	0	2	1
SEC	IDP14001	Inter Disciplinary Project	1	1	2	3
Core	MKT11015	Marketing Management	3	1	0	4
Core	FAC11007	Financial Management	3	1	0	4
Core	OBH11012	Human Resource Management	3	1	0	4
Core	OLS11001	Supply Chain Management	3	1	0	4
GE	OLS11002	Production & Operations Management	3	1	0	4
DSE	BAN11004	Data Preparation for Analytics	2	0	0	2
DSE	BAN11005	Interactive Querying and Basic Reporting	1	0	2	2
DSE	BAN11002	Programming for Analytics-1	0	0	4	2
			Total			**29**

SEMESTER-IV						
Sl. No.	**Course Code**	**Title of the Course**	**Contact Hours**			**Credit**
			L	**T**	**P**	
GE	PSG11021	Human Values and Professional Ethics	2	0	0	2
Core	FAC11008	Cost & Management Accounting	3	1	0	4
GE	IST11001	Management Information System &ERP	3	1	0	4
Core	MGT11005	Introduction to Research Methodology	3	1	0	4
GE	EIC11002	Entrepreneurship Development	3	1	0	4
SEC	BAN11002	Introduction to data analytics	0	0	4	2
DSE	BAN11006	Applied Statistical Modelling	1	0	2	2
DSE	BAN11007	Basics of R-Programming	1	0	2	2
SEC	BAN11008	Programming for Analytics-2	0	0	4	2
			Total			**26**

SEMESTER-V						
Sl. No.	**Course Code**	**Title of the Course**	**Contact Hours**			**Credit**
			L	**T**	**P**	
Core	MGT11025	International Business	3	1	0	4
GE	MGT11003	Business Ethics &Corporate Governance	3	1	0	4
DSE	BAN11009	Python Programming	1	0	2	2
DSE	BAN11010	Introduction to Optimization	2	0	0	2
DSE	BAN11011	Big Data Visualization	1	0	2	2
DSE	BAN11012	Visual Predictive Analytics	1	0	2	2
DSE	BAN11013	Basics of Business Forecasting	2	0	0	2
DSE	BAN11014	Cloud Computing	2	0	0	2
Core	MGT14001	Summer Internship Training/Project	0	0	4	2
			Total			**22**

SEMESTER-VI						
Sl. No.	**Course Code**	**Title of the Course**	**Contact Hours**			**Credit**
			L	**T**	**P**	
Core	MGT11008	Business Strategy & Policy	3	1	0	4
DSE	BAN11015	Hadoop	2	0	4	2
SEC	MKT11007	E-Commerce	3	1	0	2
Core	MGT14002	Dissertation/ Live Project	0	0	8	4
DSE	BAN11016	Marketing analytics	1	0	2	2
DSE	BAN11017	Financial Analytics	1	0	2	2
DSE	BAN11018	HR Analytics	1	0	2	2
			Total			**18**

ENG11051	Business English I	L	T	P	C
Version 1.0		2	0	0	2
Pre-requisites/Exposure	Basic Knowledge of English Language				
Co-requisites	-				

Course Objectives

1. To help the second language learners develop the ability to understand spoken language.
2. To enable students communicate with clarity and precision at workplace.
3. To give the students a perspective to appreciate life in its variables by exposing them to comprehension texts; and also to enrich their word power.
4. To enable students acquire structure and written expression required for their profession.

Course Outcomes

On completion of this course, the students will be able to

CO1. Define communication processes and to know the practical implications and its challenges at the work place.
CO2. Understand the practical uses of English grammar and to use grammar correctly and unambiguously
CO3. Develop fluency in speaking English in order to carry out effective professional communication.
CO4. Identify difficult sounds, words and phrases to support listening comprehension and be familiar with the various strategies of reading and develop the ability to read texts with fluency, understanding and competence
CO5. Make use of different formats of business communication like reports, letters, CVs and other technical writings

Course Description

English is an integral part of life. Communication is a process of exchanging ideas, messages, information etc. through verbal or nonverbal communication. In this course, the focus will be on improving LSRW skills, i.e. listening, speaking, reading and writing. Students will learn how to communicate effectively though prescribed syllabus as well as through Pearson Global English solutions. Classroom activities will be designed to encourage students to play an active role in the construction of their own knowledge and in the design of their own learning strategies. We will combine traditional lectures with other active teaching methodologies, such as group discussions, cooperative group solving problems, analysis of video scenes and debates. Class participation is a fundamental aspect of this course. Students will be encouraged to actively take part in all group activities and to give an oral group presentation. Students will be expected to interact with media resources, such as, web sites, videos, DVDs, and newspapers etc.

Course Content

Unit I: Communication Skills **[10 lecture hours]**

Communication Skills- Process and importance of communication, Communication cycle; Objectives and Principles of communication; Barriers to communication; Interpersonal Communication Skills at Work and Study

Unit II: Grammar and Writing Skills **[10 lecture hours]**

Grammar: Voice Change, Prepositions, Conjunctions, Articles, Direct and Indirect Speech, Correction of Sentences

Writing skills: Business letters (types and format), CV and Application Letters, Composition: Essays and Précis, Business Reports

Unit III: Speaking Skills **[10 lecture hours]**

Speaking (basics of pronunciation), Group Discussion, Presentation skills, Modulation and Tone

How to face an interview: frequently asked questions, body language and promptness

Text Books

T1. T1 Mishra. B, Sharma. S (2011) Communication Skills for Engineers and Scientists. PHI Learning Pvt. Ltd. ISBN: 8120337190.

T2. Chaturvedi P. D, Chaturvedi M. (2011) Business Communication: Concepts, Cases and Applications. Pearson Education India. ISBN: 8131718727.

T3. Greenbaum. Sidney. College Grammar of English. Longman Publishers. ISBN: 9780582285972.

Reference Books

R1. Pal, Rajendra and Korlahalli, J.S. (2011) Essentials of Business Communication. Sultan Chand & Sons. ISBN: 9788180547294.

R2. Kaul, Asha. (2014) Effective Business Communication.PHI Learning Pvt. Ltd. ISBN: 9788120338487.

R3. Murphy, R. (2007) Essential English Grammar, CUP. ISBN: 8175960299.

R4. C. Muralikrishna and S. Mishra (2011) Communication Skills for Engineers, Pearson education. ISBN: 9788131733844.

R5. Hamp-Lyons and Heasely, B . *Study Writing; A Course in Written English. For Academic and Professional Purposes,* Cambridge Univ. Press, 2006.

1. Wren and Martin. *High School Grammar And Composition.* S. Chand, 1995.

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

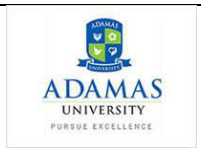
Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Define communication processes and to know the practical implications and its challenges at the work place.	**PO2** **PO3**
CO2	Understand the practical uses of English grammar and to use grammar correctly and unambiguously	**PO6** **PO7**
CO3	Develop fluency in speaking English in order to carry out effective professional communication.	**PO3** **PO6**
CO4	Identify difficult sounds, words and phrases to support listening comprehension and be familiar with the various strategies of reading and develop the ability to read texts with fluency, understanding and competence	**PO6** **PO3** **PO7**
CO5	Make use of different formats of business communication like reports, letters, CVs and other technical writings	**PO7** **PO5**

		Management Knowledge	**Problem Solution**	**Leadership and Organization Skills**	**Ethics**	**Environment and Sustainability**	**Life-long Learning**	**Creativity and Innovation**	**Prepare basic knowledge, skills, tools and techniques to enable them to take**	**Development of entrepreneurial skills and spirit.**	**Develop competencies to be socially responsible business professionals.**
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
ENG11051	Business English I	-	-	3	-	-	3	3	-	-	-

1=weakly mapped
2= moderately mapped
3=strongly mapped

Model Question Paper

Name: **Enrolment No:**	

Course: ENG11051 – **Business English**

Program: BBA **Time: 03 Hrs.**

Semester: Even 2020-21 **Max. Marks: 50**

Instructions:

Attempt any **Five Questions** from **Section A** (each carrying 2 marks); any Four **Questions** from **Section B** (each carrying 5 marks) and any **Two Questions** from **Section C** (each carrying 10 marks)**.**

	Section A (Attempt **any Five)**		
1.	What is resume? (Re)	**2**	**CO5**
2.	Define a report. (Re)	**2**	**CO5**
3.	What is fluency in speaking? Discuss with an example. (Un)	**2**	**CO3**
4.	Why is pause and pace important for oral communication? (Un)	**2**	**CO3**
5.	What is scanning? (Re)	**2**	**CO4**
6.	Fill the gaps with suitable articles. (Ap) a. She showed me _____ one pound coin. b. I waited for _____ hour and then went home.	**2**	**CO2**
7.	Fill the gaps with appropriate prepositions (Ap) a. I gave her a chair to sit ____ (on/in). b. She poured the tea _____ (in/ into) the cup.	**2**	**CO2**
	SECTION B (Attempt any **Two Questions)**		
8.	What are the factors that contribute to good speaking? (Un)	**5**	**CO3**
9.	Mention few ways to improve reading. (Un)	**5**	**CO4**
10.	Write a small paragraph on Science in daily life (within 250 words).(Ap)	**5**	**CO2**
11.	What are the factors to keep in mind during a group discussion? (Un)	**5**	**CO1** **CO2** **CO3**
	SECTION C (Attempt Any Two)		
12.	What is reading? What are the three major components of reading? Discuss with examples. (Un)	**10**	**CO4**
13.	What is speaking? What are the major barriers to good speaking? Discuss with examples.(Un)	**10**	**CO3**
14.	Write an application on behalf of your classmates to the Registrar of your university and request to establish a reading room for the students. (Ap)	**10**	**CO5**
15.	Write a dialogue on any one of the following (in 500 words): (Ap) Location: Boss's room in an office. Roles: An employee and the boss Situation: Deciding on where to go on holidays. Roles: Two friends	**10**	**CO5**

MGT11002	**BUSINESS ENVIRONMENT**	**L**	**T**	**P**	**C**
Version 1.2	**Contact Hours – 30**	2	0	0	2
Pre-requisites/Exposure	-----				
Co-requisites	--				
Academic year	2020-21				

Course objectives:

1. To enable the students to acquaint with the dynamics of business scenario in India
2. To understand the guidelines flowed by different sectors as per industrial policy.
3. To expose with the different industrial policies and the functions of WTO and GATT.

Course Outcomes

On completion of this course, the students will be able to:

CO1: - Discuss the various components of business environment under different market conditions.
CO2:- Identify various issues of environmental forces and its linkage with industry specific problems.
CO3:- Recognize and develop various industrial policies and its impact on business performance in Indian business scenario
CO4:- Illustrate environmental pros and cons with the help of different firms in India.

Course description:

Understand the environment is a primary task of all business leaders because the initial success of any business depends on its environmental background. This course will help the students to familiarize with different forces of environment. Apart from that the course will help the students to get a better understand of different sectors and their formation. This course will explain the new industrial policy guideline and how WHO and GATT functions. During the course students will be exposed the environmental policy of different corporate houses and also the thought of industry leader on industrial policy. The course will be asses by debates and discussion with various issues faced by current industries.

Course Contents:

Unit – I: 9 Hrs

Indian Business Environment: Concept, components and importance. Environmental analysis, Economic Environment, Demographic and Political environment, Technology environment , Capitalist Economy, Socialist Economy, Mixed Economy

Unit – II: 5 Hrs

Business and culture; Social responsibility of business; Consumer rights; Consumerism of business; Industrial sickness, CSR activities of Tata, HUL etc.

Unit – III: 8 Hrs

Industrial policies & regulations: Public, Private, Joint & Cooperative sectors; Industrial licensing, Privatization; Liberalization, MSME Sector, Export-import policy; Regulation of foreign investment;

Unit- IV 8 Hrs

Industrial Policy: New Industrial Policy and its Effect in India, WTO and Trading Blocks: Role and functions of WTO – Differences between WTO and GATT , Basic understanding of world bank , IMF.

Text Book(s):-

1. Business Environment: Text & Cases- Francis Cherunilam, HPH, 28th Ed.
2. Business Environment- K Aswathappa- HPH

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination
Examination Scheme:

Components	Mid Term	Attendance	Class Assessment	End Term
Weightage (%)	20	00	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Discuss the various components of business environment under different market conditions.	**PO1, PO 2, PSO1**
CO2	Identify various issues of environmental forces and its linkage with industry specific problems.	**PO1,PO2, PO3, PO 6, PSO1**
CO3	Recognize and develop various industrial policies and its impact on business performance in Indian business scenario.	**PO3, PO4, PO 6, PSO1**
CO4	Illustrate environmental pros and cons with the help of different firms in India.	**PO1,PO3, PO6, PO7**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	: Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up	Development of entrepreneurial skills and spirit	Develop competencies to be socially responsible business professionals
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO 3
MGT11002	Business Environment	3	-	3	-		3	-	3	-	

1= weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	ADAMAS UNIVERSITY PURSUE EXCELLENCE

Course: MGT11002– Business Environment

Program: BBA **Semester: I**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

SECTION A (Answer All Questions)

1.	Define concept of business environment	Remembering	**CO1**
2	Compare and contrast between internal and external environment	Understanding	**CO1**
3	Define monetary and fiscal policy?	Remembering	**CO2**
4	What are different role played by WTO.	Remembering	**CO1**
5	What do you mean technological leadership?	Remembering	**CO1**

	SECTION B (Attempt any **Three Questions)**		
1.	Explain concepts of technological environment and its impact on present business scenario.	Understanding	**CO2**
2	How business performance depends on changes in social cultural dimension of the consumers?	Remembering	**CO3, CO2**
3.	Illustrate environmental scenario with the help of an Indian industry.	Understanding	**CO 3**
4.	Analyse the role of monetary policies in economic decision of the country.	Analysing	**CO3**
	SECTION C (Attempt any **Two Questions)**		
1.	Describe the role of state and central government in development of MSME in India.	Analysing	**CO4**
2.	Explain the root cause of industrial sickness and way to prevent it (with suitable example).	Applying	**CO4**
3.	Design a plan for sustainability of industry considering major environmental force.	Creating	**CO4**

MGT11001	**Principles of Management**	**L**	**T**	**P**	**C**
Version 1.1	**Contact Hours - 60**	3	1	0	4
Pre-requisites/Exposure	Understanding concepts of Organisations				
Co-requisites	--				
Academic year	2020-21				

Course Objectives:

1. To enable the students to know evolution of Management,

2. To study the principles and functions of management.

3. To learn the application of the principles in an organization.

4. To help the students to develop cognizance of the importance of management principles.

5. To aware the student's contemporary issues and modern approaches of management.

Course Outcomes

On completion of this course, the students will be able to:

CO1: Have a good understanding of the subject of management, the important theories, its scope and impact.

CO2: Develop an understanding of the basic processes of planning, organising and directing

CO3: Understand the theories of motivation and its applications and the basic principles of management control and coordination

CO4: Exposure to the concepts of staffing including Job analysis, recruitment, selection. Brief idea about recent concepts such as Knowledge management, change management, technology management etc.

CO5: Discuss Contemporary Issues such as Social Responsibility & Ethics, Globalization, Culture etc. and their impact on management

Course Description:

Principles and practices of management is an introductory course on management process from managers' perspective. The course seeks to help students acquire the requisite knowledge, skills and abilities needed to successfully manage the organization. The course examines the logic and working of organizations and outlines the major functions of management. The main objective of this course is to help the students to get aware towards varied management principles and practices. This course covers the explanations about the fundamentals of management discipline in organizational context. It details the different functions of management such as planning, organizing, staffing, directing, and controlling. The course also emphasizes on identification of critical issues and framing of strategies and scenarios required to execute management functions.

Course Content:

Unit I: **[12 hours]**

Evolution & Growth of Management Thought

Concepts, Theory and Practice: The Evolution of Management Thought – Scientific Management School, Behavioural School, Quantitative School, Integration School, Contemporary School, McKinsey's 7-S approach

Unit II: **[12 hours]**

Planning, Organizing & Direction

Planning- Nature, Purpose, Types & Process of Planning; Concept of MBO, MBE & MBWA.
Decision Making- Approaches, Decision Making under certainty, uncertainty & risk; Group Decision Making
Organizing- Line/ Staff Authority, Decentralization & Delegation, Effective Organizing , Direction- Supervision, Span of Supervision, Graicuna's Theory of Span of Management.

Unit III: **[12 hours]**

Motivation, Control & Coordination

Motivation- elements, importance, methods, theories, Controlling- Control Process, Importance, Critical Control Standards & Techniques, Maintenance Vs Crisis Management, Overall Control Process, Coordination- Definition, Characteristics, Objectives, Techniques

Unit IV: **[16 hours]**

Staffing

Job analysis, recruitment, selection, post selection steps, job changes: transfers/promotions, performance appraisal, training, management development, job rotation, rewards and recognition

Modern approaches to Management

Concept of Knowledge management, change management, technology management, supply chain management, process and project quality standards – six sigma, CMM, CMMI, PCMM, Impact of IT quality management systems, learning organizations

Unit V: **[8 hours]**

Contemporary Issues

Social Responsibility & Ethics, Globalization & Management, Inventing & Reinventing Organizations, Culture & Multiculturalism

Text Books

TH1. Koontz, Essentials of Management, Tata McGraw Hill
TH2. L. M. Prasad: Principles of Management, Sultan Chand & Sons, 2016
TH3.. Robbins, S. (2017). Management, (13th ed.), Pearson Education, New Delhi

Project:

The class will be divided into Groups consist of 5 members. Each Group will select a company of their choice respect to study the Management Practices of a Particular Company. The Project will be brief in the session 3. The objectives of the project is to acquaint the students Management Practices in respect to a specific company. Students are required to submit the report just after Mid semester examination. Each group will present before all student as a result all students should have idea of Management Practices Mix of around 7 to 9 companies.

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination

Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Have a good understanding of the subject of management, the important theories, its scope and impact.	**PO1, PO 2**
CO2	Develop an understanding of the basic processes of planning, organising and directing	**PO1,PO2, PO3, PO 6, PSO1**
CO3	Understand the theories of motivation and its applications and the basic principles of management control and coordination	**PO1, PO3, PO 6, PSO1**
CO4	Exposure to the concepts of staffing including Job analysis, recruitment, selection. Brief idea about recent concepts such as Knowledge management, change management, technology management etc.	**PO3, PO6, PO7 PSO3**
CO5	Discuss Contemporary Issues such as Social Responsibility & Ethics, Globalization, Culture etc. and their impact on management	**PO5, PO6, PSO1,POS3**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	: Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up	Development of entrepreneurial skills and spirit.

Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2
MGT11001	Principles of Management	3	-	3	-	-	3	-	3	-

1= weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	

Course: MGT11001 – Principles of Management

Program: BBA **Semester: I**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

	SECTION A (Answer All Questions)		
1.	What are different functions of Management?	Remembering	**CO1**
2	Who developed the school of scientific management thought? Name two characteristics of scientific management thought?	Understanding	**CO1**
3	What are natures of motivation?	Remembering	**CO2**
4	Which theory of motivation is known as corner stone of Motivation theories?	Remembering	**CO1**
5	What is different need and important of departmentation?	Remembering	**CO1**
	SECTION B		
1.	Distinguish between a leader and Manager. 6. How communication processes work?	Understanding	**CO2**
2	3. What are different methods of departmentation?	Remembering	**CO3, CO2**
3.	What are staffing process?	Understanding	**CO 3**
4.	Analyse how controlling contribute for archiving objectives of any organizations?	Analysing	**CO3**
	SECTION C (Attempt any **Two Questions)**		

1.	Based on planning premises developed by ITC, identify the opportunities, threats, strength and weakness available to the company	Applying	**CO4**
2.	Compare and contrast the Maslow and Herzberg theories of motivation in present organisation of your choice. On what grounds has the Herzberg theory been criticized?	Applying	**CO4**
3.	What are different theories of leadership? Discuss each theories and which theories are more appropriate to modern management context with suitable examples?	Creating	**CO4**

MTH11514	**BUSINESS MATHEMATICS**	**L**	**T**	**P**	**C**
Version 1.1	**Contact Hours - 60**	**3**	**1**	**0**	**4**
Pre-requisites/Exposure	School level Mathematics				
Co-requisites	--				
Academic year	2020-21				

Course objectives:

1. To learn fundamentals, theory, and methods of basic mathematics to be used in simple Business/Economics and real-life problems.
2. To skill students to compute the solution of simple mathematical problems in the set theory, linear and nonlinear equations, matrix methods, differentiation and integration.
3. To help students to understand the use of various mathematical tools for solving simple Business/Economics and marketing related problems.

Course Outcomes:

On completion of this course, the students will be able to:

CO1: **Define** various terms related to the theory of sets and its properties with Venn diagrams representations. (R)

CO2: **Illustrate** the solution of linear, nonlinear equations and the problems related to the supply and demand analysis. (U)

CO3: **Find** the inverse of a matrix, determinant, and the solution of a system of linear equations arises from simple business/economics applications. (R)

CO4: **Define** the percentages, index numbers, interests, and investment appraisal. (R)

CO5: S**ummarize** the theory and methods to determine the derivatives of a function of one and several variables for the extreme value of a function. (U)

CO6: **Find** indefinite and definite integration. (R)

Course Description:

The course is designed for students of economics, business studies, and management. It assumes very little prerequisite knowledge, so the topics of this course can be understood by students who have not undertaken a mathematics course for some time. The focus of this course is to develop the fundamental knowledge, understanding of basic mathematical tools to be used in other subjects easily. This course comprises the set theory, linear and nonlinear

equations, and its applications in simple business and economics problems like supply and demands analysis, modelling of revenue etc. Also, this course covers matrix algebra and solution of a system of equations with applications in Business, and definite and indefinite. To teach this course, audio-video lecture, presentation, and assignments to be provided. Students will strongly grab the basic concepts of the course via solving exercise and interaction with course instructors.

Course Syllabus:

Unit- I **10 Hrs**

Set theory: Theory of sets- meaning, elements, types, presentation and equality of sets, union, intersection, compliment & difference of sets, Venn diagrams, Cartesian product of two sets, applications of set theory.

Unit- II **10 Hrs**

Linear equations**:** graphs of linear equations, algebraic solution of simultaneous linear equations, supply and demand analysis, algebra, modeling of supply and demand analysis, national income determination.
Non-linear equations: quadratic, exponential and logarithmic equations, modeling of revenue, cost and profit.

Unit- III **15 Hrs**

Matrices:Types, properties, addition, multiplication, transpose and inverse of matrix; properties of determinants, solution of simultaneous linear equations, differentiation and integration of standard algebraic functions, business applications of matrices.

Unit- IV **5 Hrs**

Mathematics of finance: percentages, index numbers, and interests, compound interest, investment appraisal.

Unit- V **15Hrs**

Differentiation: Derivative of a function, rules of differentiation, marginal functions and elasticity, optimization of economic functions, partial differentiation, functions of several variables, partial marginal functions and elasticity, Lagrange multipliers.

Unit- VI **5 Hrs**

Integration: Indefinite integration, definite integration.

Test book readings:

1. Ian Jacques, Mathematics for and Economics and Business (Fifth edition), Pearson India.
2. D.C. Sancheti, V.K. Kapoor, Business Mathematics,.

Reference Book:

1. J.D. Gupta, P.K. Gupta, Man Mohan, Mathematics for Business and Economics, Tata McGraw Hill Publishing Company Ltd.
2. Q. Zameeruddin, V. K. Khanna, S. K. Bhambri, Business Mathematics (Second Edition), Vikas Publishing House PVT LTD.

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	**Define** various terms related to the theory of sets and its properties with Venn diagrams representations. (R)	**PO2,PSO1**
CO2	**Illustrate** the solution of linear, nonlinear equations and the problems related to the supply and demand analysis. (U)	**PO2,PO6, PSO1**
CO3	**Find** the inverse of a matrix, determinant, and the solution of a system of linear equations arises from simple business/economics applications. (R)	**PO2,PO6,PSO1**
CO4	**Define** the percentages, index numbers, interests, and investment appraisal. (R)	**PO2,PO6,PSO1**
CO5	**Summarize** the theory and methods to determine the derivatives of a function of one and several variables for the extreme value of a function. (U)	**PO2,PO6,PSO1**
CO6	**Find** indefinite and definite integration. (R)	**PO2,PSO1**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	: Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up	Development of entrepreneurial skillsand	Develop competencies to be socially responsible business professionals
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO3
MTH11514	**BUSINESS MATHEMATICS**		3				3		3		

1=weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	ADAMAS UNIVERSITY PURSUE EXCELLENCE

Course: MTH11514 – BUSINESS MATHEMATICS

Program: BBA **Semester: I**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 1Marks); any **Three Questions** from **Section B** (Each Carrying 5Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

SECTION A (Answer All Questions)

1.	**Explain** the stationary point and represent it graphically.	U	**CO5**
2	**What** is a set and how to define complement of a set?	R	**CO1**
3	**Explain** the marginal functions with an example?	U	**CO5**
4	**Illustrate** the solution of the equation: $x^2 - 2x - 3 = 0$.	U	**CO2**

<table>
<tr><td>5</td><td>Classify the roots of the equation $x^2 + 2x + 3 = 0$.</td><td>U</td><td>CO2</td></tr>
<tr><td></td><td>SECTION B (Attempt any Three Questions)</td><td></td><td></td></tr>
<tr><td>6.</td><td>Ms. Smith and Mr. Jones are sale people in a new-car agency that sells only two models. August was the last month for this year's models, and next year's medels were introduced in September. Gross dollar sales for each month are given in the following matrices:

<table>
<tr><td></td><td colspan="2">August sales</td></tr>
<tr><td></td><td>Compact</td><td>luxury</td></tr>
<tr><td>Ms. Smith</td><td>$54,000</td><td>$ 88,000</td></tr>
<tr><td>Mr. Jones</td><td>$126,000</td><td>0</td></tr>
</table>
=A;

<table>
<tr><td></td><td colspan="2">September sales</td></tr>
<tr><td></td><td>Compact</td><td>luxury</td></tr>
<tr><td>Ms. Smith</td><td>$228,000</td><td>$ 368,000</td></tr>
<tr><td>Mr. Jones</td><td>$304,000</td><td>$322,000</td></tr>
</table>
=B,

i) What were the combined dollars in August and September for each sales people and each model?

ii) What was the increase in dollar sales from August to September?

iii) If both sale people receive 5% commissions on gross dollar sales, what is the commission for each person for each model sold in September?</td><td>5 (R)</td><td>CO3</td></tr>
<tr><td>7.</td><td>If $z = \log(x^2 - y^2)$, then show that $\frac{\partial^2 z}{\partial x \partial y} = \frac{\partial^2 z}{\partial y \partial x}$</td><td>5 (U)</td><td>CO5</td></tr>
<tr><td>8.</td><td>If the total revenue function of a good is given by $100Q - Q^2$, what will be an expression for the marginal revenue function. If the current demand is 60, compute and explain the change in the value of total revenue due to a 2 unit increase in Q.</td><td>5 (U)</td><td>CO5</td></tr>
<tr><td>9.</td><td>Find (i) $\int (2x+1)^{1/3}\, dx$ (ii) $\int_{-2}^{2} xe^{-x^2} dx$</td><td>5 (R)</td><td>CO6</td></tr>
<tr><td></td><td>SECTION C (Attempt any Two Questions)</td><td></td><td></td></tr>
<tr><td>10.</td><td>a) Find the inverse of $A = \begin{bmatrix} 2 & 4 & 1 \\ 4 & 3 & 7 \\ 2 & 1 & 3 \end{bmatrix}$,

b) Solve the system of equations:

$x + 2y + 3z = 9,$</td><td>5 +5 (R)</td><td>CO3</td></tr>
</table>

	$-4x + y + 6z = -9,$ $2x + 7y + 5z = 13,$ using Cramer's rule to **find** x & y.		
11.	a) A principal of \$2000 is invested at 10% interest compounded continuously. After **how** many days will the investment first exceed \$2100? b) The demand and supply functions of a goods are given by $P = -2Q_d + 50,$ $P = 1/2Q_s + 25,$ Where P, Q_d, and Q_s, denote the price, quantity demanded and quantity supplied respectively. i) **Illustrate** the solution by computing the equilibrium price and quantity. ii) **explain** the effect on the market equilibrium if the government decided to impose a fixed tax \$5 on each good.	5+5 (R+U)	**CO4 + CO2**
12.	a) **Show** that $A \cup (B \cap C) = (A \cup B) \cap (A \cup C)$. b) Suppose $y = x^2$. **What** is the inverse of y? Consider the domain {-1,1,-2,2}. Then draw the map and **tell** they are function or not ? c) There are 60 students in a class. 15 students do not have interest in game. 32 students play football and 18 students play cricket. Then **find** (i) how many students play both the games? (ii) how many students play only football? (iii) How many students play only cricket?	**4+3+3 (R)**	**CO1**

ECO11003	**Microeconomics**	**L**	**T**	**P**	**C**
Version 1.1	**Contact Hours - 60**	3	1	0	4
Pre-requisites/Exposure	Basic mathematics and English				
Co-requisites	--				
Academic year	2021-22				

Course objectives:

- This paper introduces students to the terminology and analytic principles used in microeconomics, which is broadly defined as the study of markets, and to the application of these conceptual tools to several policy issues.
- The decisions of buyers and sellers and their interaction in market transactions will be analysed.
- This also explores how different market structures can shape economic results, and how markets can sometimes (but not always) help society achieve desirable outcomes.

Course Outcomes

On completion of this course, the students will be able to:

CO1: Understand the terminologies and analytic principles used in microeconomics

CO2: Understand and analyze how different market structures can shape economic results

CO3: Analyze of these conceptual tools to several strategic issues in the field of management

CO4: Understand and analyze how different market structures can shape economic results

CO5: Apply micro economic concepts and techniques in evaluating business decisions

Course Description:

This paper will introduce students with more complicated issues of microeconomics around different market structures under imperfect competition . Different types of pricing strategies and market power adopted by the producers. The theoretical concepts of theories of distribution will also be introduced.

Course Structure

Unit I: Demand and Supply 12 Hrs

Determinants of Demand; Law of Demand; Demand Function, Demand Schedule and Demand Curve; Determinants of Supply; Law of Supply; Supply Function, Supply Schedule and Supply Curve; Shift and movement along the Demand & Supply Curve; Elasticity of Demand – Price, Income, Cross; Elasticity of Supply; Substitutes & Complementary Goods, Normal & Inferior Goods. Equilibrium Determination, Impact of changes in Demand and Supply, Change in Equilibrium, Stability of Equilibrium; Consumer Surplus, Producer Surplus, Deadweight Loss, Change in surplus, Incidence of Tax, Impact of Subsidy.

Unit II: Theory of Consumption 12 Hrs

Budget Constraint: Composite goods, Budget Set, Properties of budget set, Budget Line, change in budget line due to change in income and prices, Application: Taxes, Subsidies, Rationing

Preferences: Consumer Preferences, basic assumptions about preferences; Indifference Curves, Indifference Map, Marginal Rate of Substitution; Shape of Indifference curves: Perfect substitutes, perfect complements, Bads, Neutrals, Satiation, Discrete Goods

Utility: Cardinal Utility, Utility function, Total utility, Marginal Utility, Ordinal Utility, Preference, MRS

Choice:Optimal Choice, Consumer's Equilibrium, Change in Equilibrium due to change in income, and prices, Income Consumption Curve, Engel Curve, Price Consumption Curve, Individual Demand, From individual to market demand; Price Effect: Hicks, Slutsky approach, Income Effect, Substitution Effect, Compensated Demand.

Unit III: Theory of Production 15 Hrs

Technological relationship between output and inputs, Production decision of a firm; Production function, short run versus long run production; Production with single variable input: TP, AP, MP, Law of diminishing marginal return; Production with two variable inputs: Isoquant, Economic region of production, Input flexibility, Input substitution; MRTS, Elasticity of substitution; Expansion Path, Returns to scale; Effects of changes in input prices on output. Special Cases: Homogeneous Production Function, Cobb-Douglas Production.

Different types of costs; opportunity cost, sunk cost; fixed cost, variable cost; Costs in the SR production, TC, AC, MC, Cost curves; Costs in the LR production, LR cost curves, relation between SR and LR cost curves; Shift in cost curves.

Input choices, Isocost line, Change in technology and change in input prices; optimal choice of inputs, Economies of Scope, Economics of Scale, Learning Curve.

Unit IV: Market: Perfect Competition 12 Hrs

Profit Maximization by a firm, Competition in a market, Different forms of Competition;

Perfectly competitive market and its characteristics, Choosing output in Short Run, SR supply curve, Choosing output in the Long Run, LR Industry supply curve: Increasing cost industry, Decreasing cost industry, and Constant cost industry;

Efficiency of a competitive market: Effect of Tax, Minimum Prices, Price Support, Production Quota, Impact of tax and subsidy.

Unit V : Market: Imperfect Competition 10 Hrs

Market Power, Sources, Monopoly, Monopsony, Bilateral Monopoly, Natural Monopoly; Monopolist's Output Decision, and pricing.

Monopolistic Competition: Characteristics, Equilibrium in Short and Long run, Economic Efficiency; Branding

Oligopoly: market structure, collusion, competition, equilibrium.

READING LIST:

1. Dominick Salvatore (2009). Principles of Microeconomics (5th ed.) Oxford University Press

2. Koutosyannis (1979). Modern Micro Economics. Palgrave Macmillan

3. Pindyck, Rubinfeld and Mehta. (2009). Micro Economics. (7th ed.). Pearson.

4. Lipsey and Chrystal. (2008). Economics. (11th ed.) Oxford University Press.

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination
Examination Scheme:

Components	Mid Term	Attendance	Class Assessment	End Term
Weightage (%)	20	00	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Understand the terminologies and analytic principles used in microeconomics	**PO1, PO 2**

CO2	Understand and analyse how different market structures can shape economic results	**PSO1,PO2, PO3, PO 6,**
CO3	Application of these conceptual tools to several strategic issues in the field of management	**PO2, PSO1, PO 6,**
CO4	Understand and analyse how different market structures can shape economic results	**PO5, PO6, PO7**
CO5	Apply micro economic concepts and techniques in evaluating business decisions	**PSO 1, PO7, PO2**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	: Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up	Development of entrepreneurial skills and spirit
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2
ECO11003	Microeconomics	-	3	-	-	-	3	3	3	-

1= weakly mapped
2= moderately mapped
3=strongly mapped

Course Code- DGS11001	DESIGN THINKING	L	T	P	C
Version 1.0		2	0	0	2
Pre-requisites/Exposure	Knowledge of analyzing society problems and product usage problems and a zeal to improve the current situation, in addition to knowing to using laptop/computers, internet, social media interaction, file sharing and uploading, email and communication etiquettes.				
Co-requisites	--				

Course Objectives

1. To enable students to acquire knowledge, imagination and be more assertive on opinions on problems in society.
2. To enable students to learn basics of research, data collection, analysis, brainstorming to find solutions to issues.
3. To make them understand Design Thinking methodologies to problems in field of study and other areas as well.
4. To help students to understand future Engineering positions with scope of understanding dynamics of working between inter departments of a typical OEM.

Course Outcomes

On completion of this course, the students will be able to

CO1. Examine design thinking concepts and principles
CO2. Practice the methods, processes, and tools of design thinking
CO3. Apply the Design Thinking approach and model to real world scenarios
CO4. Analyze the role of primary and secondary research in the discovery stage of design thinking

Catalog Description

Design thinking course is a completely online course offered to the first year UG programs across all streams. This course is designed to help understand the steps followed in the process of designing a solution to a problem.

Course Content

UNIT I: WHAT IS DESIGN THINKING 2 hours

Designers seek to transform problems into opportunities. Through collaboration, teamwork, and creativity, they investigate user needs and desires on the way to developing human-centered products and/or services. This approach is at the very heart of design thinking.

UNIT II: THE DESIGN THINKING MODEL 2 hours

A tool that helps guide you along a design thinking path. The model does this by providing a series of activities that that will help you effectively design a product, service or solution to a user's need. The model presents the approach as a process, allowing us to look at each step – or phase – along the journey to the development of a final design.

UNIT III: PHASE 1: DISCOVER **4 hours**

Begin the design thinking process with the Discover phase, where you will identify the specific problem your design is intended to solve, as well as important usability aspects from those who will use your design. Discovery can be performed through a variety of different research methods which you will learn in this module.

UNIT IV: PHASE 2: DEFINE **4 hours**

In the Define phase, you come to understand the problem. We often refer to this as framing the problem. You can do this by using a variety of tools, including storytelling, storyboarding, customer journey maps, personas, scenarios, and more.

UNIT V: PHASE 3: DEVELOP **4 hours**

Turn your attention to solving the problem. In this phase you brainstorm custom creative solutions to the problems previously identified and framed. To do this, you conceptualize in any way that helps, putting ideas on paper, on a computer, or anywhere whereby they can be considered and discussed.

UNIT VI: PHASE 4: DELIVER **4 hours**

This phase is all about testing and building concepts. Here you take all of the ideas that have been discussed to this point and bring them a little closer to reality by building a concept; something that makes it easier for a user to experience a design. This concept is referred to as a prototype.

UNIT VII: PHASE 5: ITERATE **4 hours**

You will test the prototype of your design solution, collecting and acting on feedback received. These actions may mean minor or major revisions to your design, and are repeated as often as necessary until a solution is reached. Tools such as focus groups and questionnaires are used to help you collect feedback that can help with your final design.

UNIT VIII: BEYOND DESIGN THINKING **2 hours**

The Design Thinking Model is a tool that helps guide you along a design thinking path. The model does this by providing a series of activities that that will help you effectively design a product, service or solution to a user's need. The model presents the approach as a process, allowing us to look at each step – or phase – along the journey to the development of a final design.

Text Books

1. All the references are available to download in the online course.

Reference Books

1. Brown, Tim. "What We Can Learn from Barn Raisers." Design Thinking: Thoughts by Tim Brown. Design Thinking, 16 January 2015. Web. 9 July 2015.
2. Knapp, Jake. "The 8 Steps to Creating a Great Storyboard." Co.Design. Fast Company & Inc., 21 Dec. 2013. Web. 9 July 2015.
3. van der Lelie, Corrie. "The Value of Storyboards in the Product Design Process." Journal of Personal and Ubiquitous Computing 10.203 (2006): 159–162. Web. 9 July 2015. [PDF].

4. Millenson, Alisson. “Design Research 101: Prototyping Your Service with a Storyboard.” Peer Insight. Peer Insight, 31 May 2013. Web. 9 July 2015.

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination
Examination Scheme:

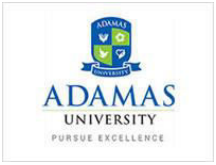
Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Examine design thinking concepts and principles.	**PO5, PO6**
CO2	Practice the methods, processes, and tools of design thinking.	**PO7, PO5**
CO3	Apply the Design Thinking approach and model to real world scenarios.	**PO6, PSO3**
CO4	Analyze the role of primary and secondary research in the discovery stage of design thinking	**PO7, PSO3**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up higher studies and research.	Development of entrepreneurial skills and spirit.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PS03
DGS11001	Design Thinking	-	-	-	-	3	3	3	-	-	3

1=weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	

Course: DGS11001– Design Thinking

Program: BBA **Semester: Odd 2020-21**

Time: 03 Hrs. **Max. Marks: 50**

Instructions:

Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

	SECTION A (Answer All Questions)		
1.	Is design thinking applicable to all spheres of human endeavor?	Remembering	**CO1**
2	Is design thinking applicable to services?	Understanding	**CO1**
3	Define wicked problems in the context of design thinking.	Remembering	**CO2**
4	What traits are needed to identify societal problems?	Remembering	**CO1**
5	Why is design thinking a collaborative process?	Remembering	**CO1**
	SECTION B		
1.	Design thinking is not common among organizations. Why?	Understanding	**CO2**
2	What are the methods of defining the social problems?	Remembering	**CO3, CO2**
3.	Design Thinking is an iterative process. Why is it so?	Understanding	**CO 3**
4.	Though time consuming, design thinking brings the most suitable solution. Analyze the statement.	Analysing	**CO3**
	SECTION C (Attempt any **Two Questions)**		
1.	Trace the genesis and evolution of Design Thinking as a method of solving wicked societal problems in your domain of study.	Applying	**CO4**
2.	Take any societal problem you feel passionately about. Discuss how you would go about finding a solution to that problem.	Applying	**CO4**
3.	Poverty is a very widespread problem the society faces. Assume you are given the authority to solve the problem in your locality. How would you go about planning for finding and implementing a solution? Who are the other agencies/bodies you would collaborate with?	Creating	**CO4**

BAN11003	**CONCEPT OF DATA STRUCTURE & DATA MANAGEMENT**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	2	0	0	2
Pre-requisites/Exposure	Basic Calculation Skills				
Co-requisites	--				
Academic Year	2021-22				

Course Objectives

1. To understand the utility of data pre-processing for Data Analytics
2. To expand individual knowledge on different data structures and data models
3. To understand the various data management techniques used in the industry
3. To gain understanding of data engineering frameworks

Course Outcomes:

CO1: Choose appropriate data structure as applied to specified problem definition

CO2: To handle operations like searching, insertion, deletion, traversing mechanism etc. on various data structures

CO3: To apply concepts learned in various domains like DBMS, compiler construction

CO4: To use linear and non-linear data structures like stacks, queues and linked list

Course Description:

Global market demand reflects the growing pervasiveness of business reporting, predictive analytics and data visualization. This course will help participants learn Data Engineering which is at the core of Data Analytics journey. The course will provide exposure to participants on different data structures and operations. Further, the course will provide exposure to data manipulation techniques and data management frameworks which will enable the participants to design strategies for overall database design and implementation.

Course structure:

Unit 1: 12 Hours

Data Structures – Introduction to Data Structures; abstract data types; linear list – single linked list implementation; circular linked list implementation; Double linked list implementation, insertion; Applications of linked lists

Stacks-Operations, array and linked representations of stacks, stack applications -infix to postfix conversion, postfix expression evaluation, recursion implementation

Queues-operations, array and linked representations. Circular Queue operations, Dequeues, applications of queues.

Searching and Sorting – Sorting- selection sort, bubble sort, insertion sort, quick sort, merge sort, shell sort, radix sort, Searching-linear and binary search methods, comparison of sorting and searching methods

Unit 2: 8 Hours

Trees – Definitions, tree representation, properties of trees, Binary tree, Binary tree representation, binary tree properties, binary tree traversals, binary tree implementation, applications of trees, Introduction to Databases and Transactions**:** What is database system, purpose of database system, view of data, relational databases, database architecture, transaction management, Data Models: The importance of data models, Basic building blocks, Business rules, The evolution of data models, Degrees of data abstraction

Unit 3: 10 Hours

Database Design; ER-Diagram and Unified Modeling Language- Issues, weak entity sets, Codd's rules, Relational Schemas; Relational database model: Logical view of data, keys, integrity rules; Relational Database design (RDBMS): features of good relational database design, atomic domain and Normalization (1NF, 2NF, 3NF, BCNF); Relational Algebra and Calculus**:** set operations, renaming, Joins, Division, syntax, semantics. Operators, grouping and ungrouping, relational comparison; Constraints, Views and SQL- What is constraints, types of constrains, Integrity constraints, Introduction to views, data independence, security, updates on views, comparison between tables and views

SQL: data definition, aggregate function, Null Values, nested sub queries, Joined relations. Triggers

Suggested Readings:

1. **Database System Concepts- Henry F. Korth, Abraham Silberschatz, S. Sudarshan**
2. **Foundations of SQL Server 2008 R2 Business Intelligence- Guy Fouche & Lynn Langit**

Project:

The class will be divided into Groups consisting of 5 members each. Each group will be given a dataset which will analyze one real life scenario. The Group will have to analyze the data and create reporting frameworks and dashboards learnt during the sessions. Each group will present before all student as a result all students should have an idea of different real life scenarios and how to analyze the data.

Modes of Evaluation: Quiz/Assignment/presentation/Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Choose appropriate data structure as applied to specified problem definition	**PO1, PO2, PO6, PO7, PO8, PSO1**
CO2	To handle operations like searching, insertion, deletion, traversing mechanism etc. on various data structures	**PO1, PO2, PO6, PO8, PSO1, PSO2**
CO3	To apply concepts learned in various domains like DBMS and compiler construction	**PO1, PO2, PO6, PO7, PO8, PSO1, PSO2**
CO4	To use linear and non-linear data structures like stacks, queues and linked list	**PO1, PO2, PO3, PO6, PO7, PO8, PSO1, PSO2, PSO3**

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics and Governance	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Employability	Create capabilities of converting theoretical knowledge and data into practical applications with help of analytical tools and techniques.	Keep abreast of trans-disciplinary trends which can be brought to bear in creating strategic and tactical benefits in a VUCA world.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 03
BAN11003	Concept of data structure and Database Management	3	3	1	-	-	3	2	2	3	2	2

1= weakly mapped

2= moderately mapped

3=strongly mapped

Semester – I

FAC11003	Principles of Accounting	L	T	P	C
Version **1.0**	**Contact Hours - 60**	**3**	**1**	**0**	**4**
Pre-requisites/Exposure	Basics of Accounting				
Co-requisites					

Course Objectives

01	This course will enable the students to have knowledge about the basics of accounting with concepts, principles and conventions.
02	The students of this course will learn recording of transactions in journal, posting it to ledger and checking the authenticity of records by preparing trial balance.
03	The students of this course will learn depreciation accounting required in the preparation of financial statements.
04	The course will help the students in understanding the method of preparation of cash book and Bank Reconciliation Statement.
05	The students of this course will have the ability to prepare Financial Statements of different forms of business entities.

Course Outcomes

On completion of this course the students will be able to:

CO1	**Discuss** the basics of accounting with concepts, principles and conventions.
CO2	**Record** transactions in journal, post it to ledger and check the authenticity of records by preparing trial balance.
CO3	**Apply** the knowledge of depreciation accounting in preparation of financial statements.
CO4	**Prepare** cash book and evaluate the reasons of difference between cash book and pass book balance and prepare Bank Reconciliation Statement.
CO5	**Prepare** Financial Statements of different forms of business entities.

Course Description

Financial Accounting refers to information describing the financial resources, obligations, and activities of an economic entity. The term financial position is used to describe an entity's financial resources and obligations at one point in time, and the term results of operations is used to describe its financial activities during the year. The course focuses on detailed understanding of accounting information system, accounting concepts, accounting principles, accounting cycle, recording of transactions, and financial statement concepts.

Course Contents

Unit-1	**Introduction**	**(3 L)**

Nature of accounting; Users of accounting information; Financial & Management Accounting; Qualitative characteristics of accounting information; Double entry book keeping system – Basic accounting equation, meaning of assets, liabilities, equity, revenue and expenses; Accounting Cycle

Unit-2	**Accounting Concepts and Conventions**	**(3 L)**

Bases of accounting: Cash basis and Accrual basis, Basic concepts and conventions: entity, money measurement, going concern, cost, realization, accruals, periodicity, consistency, prudence (conservatism), materiality, matching and full disclosures.

Unit-3	**Journal and Ledger**	**(8 L)**

Journal: Introduction, need, functions, advantages of Journal, recording of entries in Journal with narration; Double entry system

Ledger: Features and functions of ledger, posting from journal to respective ledger.

Unit-4	**Trial Balance**	**(4 L)**

Introduction, need and limitations of trial balance, preparation and application of trial balance, errors and types of errors

Unit-5	**Depreciation**	**(5 L)**

The nature of depreciation - The accounting concept of depreciation - Factors in the measurement of depreciation - Methods of computing depreciation: straight line method and diminishing balance method - Disposal of depreciable assets - change in method of charging depreciation - Accounting for depreciation: Asset-depreciation, Asset-provision.

Unit-6	**Cash Book and Bank Reconciliation Statement**	**(7 L)**

Cash Book: Introduction, features, functions, advantages, types of cash book-single column, double column, triple column and petty cash book.

Bank Reconciliation Statement: Banking transactions in the Cash Book and Bank Pass Book; Causes of Disagreement between the balances as per Cash Book and Bank Statement; Practical steps for preparation of Bank Reconciliation Statement.

Unit-7	**Final Accounts**	**(10 L)**

Preparation of Financial Statements: Sole Proprietorship business entities from a Trial Balance – Manufacturing, Trading, P/L A/c and Balance Sheet.

Suggested Readings:

Text Books:

1. Sukla, Grewal, Gupta: Advanced Accountancy, Vol. I, S. Chand
2. Sehgal & Sehgal, Advanced Accountancy, Vol. I, Taxman Publication
3. Hanif & Mukherjee, Financial Accounting, TMH

Reference Books:

4. Tulsian, Financial Accounting, Pearson
5. Mukherjee and Mukherjee, Financial Accounting Volume I, Oxford Publication

Modes of Examination: Assignment/Quiz/Project/Presentation/Written Exam

Examination Scheme:

Components	Internal	Mid Term	End Term
Weightage (%)	**30**	**20**	**50**

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos

	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	**Discuss** the basics of accounting with concepts, principles and conventions	**PO1, PO2, PO5**
CO2	**Record** transactions in journal, post it to ledger and check the authenticity of records by preparing trial balance.	**PO1, PO2, PO5**
CO3	**Apply** the knowledge of depreciation accounting in preparation of financial statements.	**PO1, PO2, PO5**

CO4	**Prepare** cash book and evaluate the reasons of difference between cash book and pass book balance and prepare Bank Reconciliation Statement.	**PO2, PO4, PO5**
CO5	**Prepare** Financial Statements of different forms of business entities.	**PO2, PO3, PO5**

		Holistic overview on Trade and Commerce	Expertise in Accounting and Management Accounting	Specific Trade and Commerce practices	Knowledge on BIFS	Analytical skills for Decision Making and Research
Course Code	**Course Title**	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**
FAC11003	**Principles of Accounting**	**3**	**3**	**1**	**1**	**3**

1=Weakly mapped	2=Moderately mapped	3=Strongly mapped

LWJ11014	**Business Law**	L	T	P	C
Version 1.0	**Contact Hours – 60**	3	1	0	4
Pre-requisites/Exposure	-				
Co-requisites	-				

Course Objectives

1. To provide basic and broad knowledge in business laws in management.
2. To get the ability to apply concepts, principles and theories to understand simple business laws.
3. To become aware of the different business laws.
4. To gain awareness of the global business laws and its impacts on businesses.

Course Outcomes

On completion of this course, the students will be able to

CO1. Understand the Legal environment in India and would be in position to differentiate on the functions of different courts and their structure.
CO2. Understand and learn the concept of Contract Act, its applicability in business and litigations to draft a valid contract.
CO3. Describe the applicability of Sale of Goods act, Rights of Seller and Buyer
CO4. Recognition of Consumer Redressal forum and also to understand their rights and duties.
CO5. Understand the concept of negotiable instruments and importance of such instruments in business organization.

Course Description

This course is designed to provide the student with knowledge of the legal environment in which a consumer and businesses operates, and to provide the student with knowledge of legal principles

Course Content

Unit-1 Introduction to Business Law (10 Hrs)

Meaning and Philosophy of Law - Object ofLaw - Classification of Law - Justice Delivery System in India - Classification of Courts in India

Unit-2: Indian Contract Act, 1872

(14 Hrs)

Contract: Meaning and essential elements of a valid contract, types of contracts. Offer and Acceptance: meaning, rules relating to valid offer and acceptance; Consideration: definition; essential elements, Capacity of Parties; free consent; Void and Voidable Agreements: wagering agreement. Discharge of Contracts: meaning; methods of termination or discharge of contract. Special Contracts

Unit-3: The Sale of Goods Act, 1930

(12 Hrs)

Meaning of Contract of a Sale**,** Sale and an agreement to sell, Essential elements of contract of sale, Sale distinguished from hire purchase , Bailment , Mortgage .Conditions and Warranties, Doctrine of Caveat Emptor ,Unpaid seller and his rights.

Unit-4: Consumer Protection Act, 1986
(12 Hrs)
Objective of the Act, Definitions of complaint, consumer; consumer dispute, goods, services, etc. Objectives of Central Council and State Council, Consumer Dispute Redressal forums, Manner of Lodging a Complaint and Appeal

Unit-5: Negotiable Instruments Act
(12Hrs)
Definition of a negotiable instrument; instruments negotiable by law and by custom; types of negotiable instruments; parties to a negotiable instrument - duties, rights, liabilities and discharge; material alteration; crossing of cheques

Reference Books

Text Books:

1. P C Tulsian (2017), Business Law, 3rd Edition, Tata McGraw Hill, New Delhi
2. M.C. Kuchhal and Vivek Kuchal (2018), Business Law, 7th Edition, S Chand Publishing
3. Telpal Seth, (2017) Business Law, 3rd Edition, Pearon

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Understand the Legal environment in India and would be in position to differentiate on the functions of different courts and their structure.	**PO3, PO6, PSO2**
CO2	Understand and learn the concept of Contract Act, its applicability in business and litigations to draft a valid contract.	**PO5, PO4, PSO2**
CO3	Describe the applicability of Sale of Goods act, Rights of Seller and Buyer.	**PO5, PO4, PO6**
CO4	Will be able to understand the process of Consumer Redressal forum and also to understand their rights and duties	**PO5, PO3, PSO1**
CO5	Understand the concept of negotiable instruments and importance of such instruments in business organization.	**PO4, PO4, PSO1**

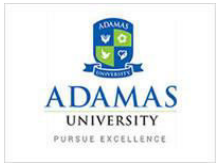
		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up higher studies and research.	Development of entrepreneurial skills and spirit.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PS03
LWJ11014	Business Law	-	-	-	3	3	3	-	3	-	3

1=weakly mapped

2= moderately mapped

3=strongly mapped

Model Question Paper

Name: **Enrolment No:**	

Course: LWJ11014 – Business Law

Program: BBA **Time: 03 Hrs.**

Semester: II **Max. Marks: 50**

Instructions:

Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

	SECTION A (Answer All Questions)		
1.	Define Business Law. **(Remembering)**	**2**	**CO1**
2.	Define Contract. **(Remembering)**	**2**	**CO2**
3.	Explain the meaning of Bailment. **(Understanding)**	**2**	**CO3**
4.	Define Consumer as per Consumer Protection Act. **(Remembering)**	**2**	**CO4**
5.	Define Negotiable Instrument. (**Remembering)**	**2**	**CO5**
	SECTION B		
1.	Explain the elements of a valid contract. (**Understanding)**	**5**	**CO2**
2.	Distinguish between Hire Purchase and Lease. **(Analyzing)**	**5**	**CO3**
3.	State the ethical issues involved in Legal System in India. **(Analyzing)**	**5**	**CO1**
4.	Explain the functions of Consumer Dispute Redressal Forum. **(Analyzing)**	**5**	**CO5**
	SECTION C (Attempt any **Two Questions)**		
1.	Explain the process of Lodging of Complaint and Appeal. **(Creating)**	**10**	**CO4**
2.	Explain the consequences of material alterations in negotiable instruments. **(Understanding)**	**10**	**CO5**
3.	(a) Define Free Consent. (**Remembering**) (b) Explain the term Wagering Agreement. **(Understanding)** (c) Classify the law as per the Indian Judiciary System **(Analyzing)**	**2** **2** **6**	**CO2** **CO2** **CO1**

SDS11503	**Business Statistics**	**L**	**T**	**P**	**C**
Version 1.1	**Contact Hours - 60**	3	1	0	4
Pre-requisites/Exposure	12^{th} level Mathematics				
Co-requisites	--				
Academic year	2020-21				

Course objectives:

1. To use the techniques of statistical analysis, which are commonly applied to understand and analyse business problems.
2. To strengthen the knowledge of the students in data collection, presentation, and to understand the basic descriptive properties of the data with statistical tools and techniques.
3. To enhance the fundamental knowledge of probability where the true essence of statistics lies.

Course Outcomes

On completion of this course, the students will be able to:

CO1: **Define** different measurements of statistical data and diagrammatic representation of data.

CO2: **Illustrate** the basic concept of correlation and regression of bivariate data.

CO3: **Classify** classical, statistical and axiomatic definition of probability and use Bay's theorem to measure happening of an event.

CO4: **Compare** discrete distribution and continuous distribution of random variables with their fundamental properties.

CO5: **Find** probability mass function of Binomial distribution, geometric distribution and Poisson distribution.

CO6: **Define** probability density function of Uniform distribution and Normal distribution.

Course Description:

This course introduces several techniques of statistical analysis, which are commonly applied to understand and analyse business problems. The course deals with simple tools and techniques, which will help a student in data collection, presentation, and to understand the basic descriptive properties of the data. This course introduces the concept of bivariate data and their application in several areas.

A major emphasis is given on the fundamental knowledge of probability where the true essence of statistics lies. This course contains probability distribution of discrete and continuous random variables, different measures to obtain the nature of statistical data, correlation and regression.

Course Structure

Unit-I 10L

Statistics: definition, scope and limitation, presentation of data, diagrammatic and graphical representation of data, measures of central tendency, mean, median and mode, geometric and harmonic mean and their limitations.

Unit-II 10L

Correlation: Scatter diagram, Karl-Pearson's correlation, concurrent deviation method, rank correlation, uses of correlation in business regression, regression lines, regression coefficients, properties of regression coefficients, and uses of regression in business problems.

Unit-III 10L

Theory of probability: Probability as a concept, basic probability rules, tree diagrams, conditional probability, mutually exclusive events and independent events, Bayes' theorem or inverse probability rule.

Unit-IV 08L

Probability distribution of a random variable: Discrete and Continuous random variables, expectation value, mean and variance of a random variable, theorems on expectation.

Unit-V 14L

Theoretical probability distributions: Probability mass function and density function, discrete distributions, the Binomial distribution and its properties, idea of geometrical and hyper geometric distributions, the Poisson distribution and its properties, fitting a Binomial or Poisson distribution to an observed distribution.

Unit-VI 08L

Continuous distribution, uniform, exponential and Normal distributions, Normal approximation to Binomial and Poisson distributions.

Text Book(s):-

TH-1. Gupta, S.P. & M.P. Gupta, Business Statistics

TH-2. Davis: Business Statistics using Excel, Oxford University Press.

TH-3. Gupta, C.B., An Introduction to Statistical Methods

TH-4. Gupta, B.N., An Introduction to Modern Statistics

TH-5. Sancheti, S.C. & V.K. Kapoor, Statistical Methods

TH-6. Ellhans, D.N., Fundamentals of Statistics

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination
Examination Scheme:

Components	Mid Term	Attendance	Class Assessment	End Term
Weightage (%)	20	00	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	**Define** different measurements of statistical data and diagrammatic representation of data.	**PO2, PO6, PSO3**
CO2	**Illustrate** the basic concept of correlation and regression of bivariate data.	**PO2, PO 6, PSO1**
CO3	**Classify** classical, statistical and axiomatic definition of probability and use Bay's theorem to measure happening of an event	**PO2, PO 6, PSO1**
CO4	**Compare** discrete distribution and continuous distribution of random variables with their fundamental properties.	**PO6, PSO1**
CO5	**Find** probability mass function of Binomial distribution, geometric distribution and Poisson distribution.	**PO2, PO6, PSO3**
CO6	**Define** probability density function of Uniform distribution and Normal distribution.	**PO2, PO6**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up higher studies and research.	Development of entrepreneurial skills and spirit.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO3
SDS11503	Business Statistics		3				3		3		3

1= weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	ADAMAS UNIVERSITY PURSUE EXCELLENCE

Course: SDS11503 – **Business Statistics**
Program: BBA **Semester: II**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

SECTION A (Answer All Questions)

1.	**Define** primary data and secondary data.	Remembering	**CO1**
2	**Show** that $Cov(x,x) = \sigma_x^{\ 2}$.	Understanding	**CO2**
3	**Explain** the limitations of classical definition of probability.	Understanding	**CO3**
4	**What** is median and mode of a distribution?	Remembering	**CO1**
5	**Explain** the positive and negative correlation.	Understanding	**CO2**
	SECTION B		
1.	The average salary of male employees in a firm was Rs. 5200 and that of females was Rs. 4200. The average salary of all employees was Rs. 5000. **Find** the percentage of male and female employees.	Remembering	**CO1**
2	A speaks the truth 3 out of 4 times and B 7 times out of 10. They agree in their statement that from a bag containing 6 balls of different colors, a white ball has been drawn. **Find** the probability that the statement is true.	Understanding	**CO3**
3.	The distribution function F(x) of a random variate X is defined as follows $F(x) = \begin{cases} A, -\infty < x < -1 \\ B, \ -1 \le x < 0 \\ C, \ \ 0 \le x > 2 \\ D, \ \ 2 \le x < \infty \end{cases}$ **Find** the value of the constants A, B, C, D given that $P(X = 0) = \frac{1}{6}$ and $(X > 1) = \frac{2}{3}$.	Understanding	**CO4**
4.	If a random variable X follows normal distribution such that $P(9.6 \le X \le 13.8) = 0.7008$ and $P(X \ge 9.6) = 0.8159$ where $\frac{1}{\sqrt{2\pi}}\int_{-\infty}^{0.9} e^{-\frac{t^2}{2}}dt = 0.8159$, $\frac{1}{\sqrt{2\pi}}\int_{-\infty}^{1.2} e^{-\frac{t^2}{2}}dt = 0.8849$, **find** mean and variance of X.	Remembering	**CO6**

	SECTION C (Attempt any **Two Questions)**		
1.	Suppose you are working with a data set(X) that is normally distributed with mean(μ)as 200 and standard deviation (σ) as 47. Then **find** the following (i) the value of x for which 60% of the values are greater than x. (ii) $P(X \leq 250)$. (iii) How much percentage of the data is in the interval$[175,225]$?	Remembering	**CO6**
2.	Goals scored by two teams A and B in football seasons were as follows: Find out which team is more consistent?	Remembering	**CO1**
3.	a) **Show** that the correlation coefficient for the following data is 0.6: b) **Show** that mean and variance of a Poisson distribution is same.	Understanding Remembering	**CO2** **CO5**

Team A	27	9	8	5	4
Team B	17	9	6	5	3

x	10	14	18	22	26	30
y	18	12	24	6	30	36

ECO11501	**Macroeconomics**	**L**	**T**	**P**	**C**
Version 1.1	**Contact Hours - 60**	3	1	0	4
Pre-requisites/Exposure	Understanding management principles				
Co-requisites	--				
Academic year	2021-22				

Course objectives:

1. To develop fundamentals ideas of macroeconomics relevant to business.
2. The course will help to learn different theories associated with issues of open as well as closed economies.
3. The course should develop idea of output and employment determination in a country in short as well as long runs.

Course Outcomes:

At the end of the course, the student will be able to:

CO1	Understand various theoretical issues related to an open economy.
CO2	Recall of measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation, and the balance of payments
CO3	Explore various alternative theories of output and employment determination in a closed economy in the short run as well as long run and the role of policy in this context

Course Description:

The objective of the course is to make students understand and analyse how different macroeconomic variables are measured and can shape economic results. The course analyses different macroeconomic concepts and techniques in evaluating business decisions under different situations both in case of open and closed economy. Students will be able to understand the terminologies and analytic principles used in macroeconomics and the application of these conceptual tools to several strategic issues in the field of management. Simple geometry and basic concepts of mathematics will be used in the course of teaching.

Course Structure:

Unit 1: Introduction to Macroeconomics and National Income Accounting

Basic issues studied in macroeconomics; measurement of gross domestic product; income, expenditure and the circular flow; real versus nominal GDP; price indices.

Unit II: The Closed Economy in the Short Run

Classical and Keynesian systems; simple Keynesian model of income determination; ISLM model; fiscal and monetary multipliers.

Unit III: Aggregate Demand and Aggregate Supply Curves

Derivation of aggregate demand and aggregate and supply curves; interaction of aggregate demand and supply.

Unit 1V: Money and Inflation

Functions of money; quantity theory of money; determination of money supply and demand; credit creation; tools of monetary policy, cost push and demand pull inflation.

Unit V: Unemployment and Expectations

Aggregate supply- the Sticky-Price Model, the Imperfect Information Model; Okun's Law; the short-run trade -off between inflation and unemployment; Phillips Curve; Shifts in the Phillips curve; the role of expectation; Natural Rate of unemployment ;The Phillips curve and the Aggregate supply curve; The debate.

Text Books

T1. N. Gregory Mankiw. Macroeconomics, Worth Publishers, 7th edition, 2010.

T2. Dornbusch, Fischer and Startz, Macroeconomics, McGraw Hill, 11th edition, 2010

T3. Andrew B. Abel and Ben S. Bernanke, Macroeconomics, Pearson Education, Inc., 7th edition, 2011.

Reference Books

R1. Olivier Blanchard, Macroeconomics, Pearson Education, Inc., 5th edition, 2009

R2. Steven M. Sheffrin, Rational Expectations, Cambridge University Press, 2nd edition, 1996.

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	Mapped Program Outcomes

CO1	Understand various theoretical issues related to an open economy.	**PO1, PO 2, PO6, PSO1**
CO2	Recall of measurement of aggregate macroeconomic variable like savings, investment, GDP, money, inflation, and the balance of payments	**PO1,PO2, PO 6, PSO1**
CO3	Explore various alternative theories of output and employment determination in a closed economy in the short run as well as long run and the role of policy in this context	**PO1, PO2, PO3, PO 6, PSO1**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	: Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up	Development of entrepreneurial skills and spirit	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PS O3
ECO11501	Macroeconomics	3	3				3		3		

1= weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	

Course: ECO11501– Macroeconomics

Program: BBA **Semester: II**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

SECTION A (Answer All Questions)

1.	Define trade balance.	Remembering	**CO1**
2	Justify the statement 'Short Run Phillips Curve is downward sloping'.	Understanding	**CO3**
3	Define GDP deflator.	Remembering	**CO2**
4	What is the relationship between investment and income in Simple Keynesian Model	Remembering	**CO2**
5	What do you mean by marginal propensity to consume?	Remembering	**CO2**
	SECTION B		
1.	Explain graphically the change in the position of aggregate expenditure curve due to fall in interest rate.	Understanding	**CO2**
2	Discuss the nature of Long Run Phillips Curve	Applying	**CO3,**
3.	Illustrate Capital Account in the Balance of Payment.	Understanding	**CO 1**
4.	Analyse how MPC (marginal propensity to consume) and the slope of IS curve.	Analysing	**CO2**
	SECTION C (Attempt any **Two Questions)**		
1.	What are the assumptions of Simple Keynesian Model and illustrate the role of inventory in Keynesian system in open economy.	Remembering, Understanding	**CO1**
2.	Discuss in detail the three methods of National income accounting and state the precautions that should be kept in mind while calculation national income.	Applying	**CO2**
3.	Discuss graphically the impact of increase in money supply in the economy on equilibrium level of income and interest rate in	Applying	**CO2**

	IS-LM model.		

OBH11002	**Behavioural Science**	**L**	**T**	**P**	**C**
Version 1.1	**Contact Hours – 60**	3	1	0	4
Pre-requisites/Exposure	Understanding management principles				
Co-requisites	Developing human skills				
Academic year	2021-22				

Course Objectives:

1. Provide scope to the students to develop behavioral insight, identifying and prioritizing behaviors effectively, in the context of individuals, groups and organizations.

2. Use behavioral frameworks to systematically investigate and analyze behaviors.

3. Develop a behavior change intervention using a behavioral analysis.

4. Think through how a behavior change intervention can be implemented effectively.

Course Outcomes:

At the end of the course, the student will be able to:

CO1: Familiarize with basic individual and group behavioral aspects that influence organizational effectiveness, sustainability and change.

CO2: Understand inter-personal behavior in work groups and develop knowledge and skills in communication, and relationship building.

CO3: Understand and manage interpersonal relationships and thus maintain better workplace environment.

CO4: Understand and participate in handling issues related to individual behavior and inter-personal behavior

Course Description:

This course fulfills behavioral requirements of BBA students and is open to any graduate student with interest in the material. This course covers essential content in addressing behavioral science concepts for application across corporate or business management domains. The course focuses on Group and Organizational dimensions of behavioural science. It provides exposure to multiple behavioral theories and application of theory in understanding the behavior of employees at work. Lectures and readings provide students with an overview of theories and their implementation. Group activities provide the opportunity to apply learning to practice simulations, and assignments to synthesize lectures and readings into intellectual and creative documents.

Course Content:

Unit I: Introduction to Organization Behavior: Concept and Emergence of OB Concept; Disciplines contributing to the field of OB, Challenges and Opportunities for Organizational Behavior. [10 Lectures]

Unit II: Individual Dimensions in Organizational Behavior: Personality – Meaning, Theories, Determinants and Distortions; Perception – Meaning, Process, etc.; Motivation – Meaning, Process, Content Theories vs. Process Theories, Maslow's Need Hierarchy, Herzberg's Two Factors Theory, Goal Setting Theory, etc.; Attitude and Job Satisfaction. [10 Lectures]

Unit III: Inter-personal Behavior: Interpersonal Communication and Feedback; Transactional Analysis (TA); Johari Window; Managing misbehavior at work - Sexual abuse, Substance abuse, Cyber slacking, etc. [10 Lectures]

Unit IV: Group and Interpersonal Dimensions: Group Formation, Classification, Stages of Group Development, Dysfunctional Groups, Group Decision Making; Conflict Management - Types of Conflicts, Traditional and modern approaches to Conflict, Resolution of Conflict; Leadership – Styles & Theories; Power; Communication; Negotiation

[10 Lecture Hours]

Unit IV: Organizational Dimensions and Processes: Organization Culture – Concept; Organizational Climate - Concept, Determinants, OCTAPACE Model; Organizational Effectiveness - Concept and Measurement; Organizational Change – Concept, Resistance and Management. [10 Hours]

Text Books:

1. Aswathappa, K.: Organization Behaviour, Himalaya Publishing House, Mumbai.
2. Prasad, L.M.: Organization Theory and Behaviour, HPH, New Delhi.
3. Luthans, F.: Organizational Behaviour, Ed. VII, PHI, New Delhi.

Reference Book(s) & other resources:

1. Robins, S.P. and Sanghi, S.: Organizational Behaviour, Ed. XI, Pearson-Education, New Delhi.
2. Sakaran, U.: Organizational Behaviour, TMH, N. Delhi.

3. Newstrom, J. W. and Davis, K: Organizational Behaviour: Human Behaviour at Work, Ed. V. New Delhi: Tata McGraw Hill.
4. Mullins, L. J.: Management and Organizational Behaviour, Pearson- Education, N. Delhi.

Project:

The class will be divided into groups consisting of 5 members in each. Each group will interact with 20 people to understand the behavioural and attitudinal changes observed in them in the pandemic crisis. The objective of the project is to acquaint the students with the relevance of the behavioural theories and concepts. Students are required to submit the report just after mid-semester examination. Each group will present their work in the class such that all students should have an idea of the practical and managerial implications of behavioural concepts.

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Familiarize with basic individual and group behavioral aspects that influence organizational effectiveness, sustainability and change.	**PO1, PO 2, PSO1**
CO2	Understand inter-personal behavior in work groups and develop knowledge and skills in communication, and relationship building.	**PO1,PO2, PO3, PO 6, PSO3**
CO3	Understand and manage interpersonal relationships and thus maintain better workplace environment.	**PO2, PO4, PO 6, PSO1**
CO4	Understand and participate in handling issues related to individual behavior and inter-personal behavior	**PO2, PO1, PO7, PSO3**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up higher studies and research and research	Development of entrepreneurial skills and spirit	Develop competencies to be socially responsible business professionals
Course Code	Course Title	PO1	PO2	PO3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3
OBH11002	Behavioural Science	3	3	-	-	-	-	-	3	-	3

1=weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	ADAMAS UNIVERSITY PURSUE EXCELLENCE

Course: OBH11002 – Behavioural Science

Program: BBA **Semester: II**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

SECTION A (Answer All Questions)

1.	What do you understand by the term 'Organizational Behaviour'?	Remembering	**CO1**
2	How does interpersonal relationship influence team performance?	Understanding	**CO1**
3	What is Self-actualization? Give example.	Remembering	**CO2**

4	What is the difference between Group and Team?	Remembering	**CO1**
5	Comment on the relation between employee behavior and organizational effectiveness.	Remembering	**CO1**
	SECTION B (Attempt any **Three Questions)**		
1.	Discuss how the subjects of Psychology, Social Psychology and Sociology contribute to the study of Organizational Behavior.	Understanding	**CO2**
2	Compare Maslow's Need Hierarchy Model of motivation with Herzberg's Two Factor Theory of motivation.	Remembering	**CO3, CO2**
3.	Discuss the problems that may arise in the various phases of Group Development.	Understanding	**CO 3**
4.	Discuss the major factors that influence individual behavior in general.	Analyzing	**CO3**
	SECTION C (Attempt any **Two Questions)**		
1.	**More Than a Paycheck** Lakhan Gokhale was a trainer for a large builder of homes. Gokhale had been hired fresh from graduate school with a master's degree in English. At first, the company put him to write and revise company brochures and help in important correspondence at the senior level. Soon senior management officials noticed how well Gokhale worked with executives on their writing, and also made them feel more confident about it. The company moved Gokhale into its prestigious training department. The company's trainers worked with thousands of supervisors, managers, and executives, helping them learn everything from new computer languages to time management skills to how to get the most out of the workers on the plant floor, many of whom were unmotivated high school dropouts. Soon Gokhale was spending all his time giving short seminars on executive writing as well as coaching his students to perfect their memos and letters. Gokhale's supervisor, Mira Aiyer knew that Gokhale was getting more money than many executives who had been with the company three times as long. Yet in her biweekly meetings with him, she could tell that he wasn't happy. When Aiyer asked him about it, Gokhale replied that he was in a bit of a rut. He had to keep saying the same things over and over in his seminars, and business memos weren't as interesting as the literature he had	Applying	**CO4**

	been trained on. But then, after trailing off for a moment, he blurted out, "They don't need me!" Since the memos filtering down through the company were now flawlessly polished, and the annual report was 20 percent shorter but said everything it needed to, Gokhale's desire to be needed was not fulfilled. The next week, Gokhale came to Aiyer with a proposal: What if he started holding classes for some of the floor workers, many of whom had no future within or outside the company because many could write nothing but their own names? Aiyer took the idea to her superiors. They told her that they wouldn't oppose it, but Gokhale couldn't possibly keep drawing such a high salary if he worked with people whose contribution to the company was compensated at minimum wage. Gokhale agreed to a reduced salary and began offering English classes on the factory floor. At first only two or three workers showed up. Gokhale believed that they only wanted an excuse to get away from work. But gradually word got around that Gokhale was serious about what he was doing and didn't treat the workers like kids in a remedial class. At the end of the year, Gokhale got a bonus from the vice president in charge of production. Although Gokhale's course took workers off the job for a couple of hours a week, productivity had actually improved since his course began, employee turnover had dropped, and for the first time in over a year, some of the floor workers had begun to apply for supervisory positions. Gokhale was pleased with the bonus, but when Aiyer saw him grinning as he walked around the building, she knew he wasn't thinking about his bank account. **Case Questions:** [5+5=10 Marks] A) What need theories would explain why Lakhan Gokhale was unhappy despite his high income? B) What do you think might have led to improvement in productivity and fall in employee turnover after Gokhale started offering English classes to the floor workers?		
2.	Critically examine the relationship between expectancy, instrumentality and valence according to Vroom's Expectancy	Applying	**CO4**

	Theory of Motivation.		
3.	Discuss relevance of JOHARI Window in self-analysis and self-development. Give an illustration to explain.	Creating	**CO4**

Course Code IDP14001	Inter-Disciplinary Project	L	T	P	C
Version 1.0		-	-	-	3
Pre-requisites/Exposure	Knowledge of Basic English				
Co-requisites	Knowledge of Basic Computer Skills				

Course Objectives

This course will develop a student's knowledge of and appreciation for the

- interdisciplinary nature of knowledge and learning
- importance and value of integrating knowledge and perspectives from multiple disciplines as a means to evaluating and understanding complex topics, problems, issues, phenomena, and events
- competencies learned during the educational process and to apply these competencies in a real-world application

CourseOutcomes

Upon successful completion of the course, students will be able to

CO1. recognize the unique advantages of integrative research and learning
CO2. understand the fundamentals of research methods and practices of various academic disciplines
CO3. demonstrate an understanding of current issues and concerns
CO4. realize the importance of ethics in research process
CO5. understand the inter-disciplinary systems of research documentation

Typical Progress Roadmap

- After discussion with the Project Advisor(s), each student shallprepare an initial outline of their assigned project indicating the major sections of discussion, list the principal research sources for each section, and explain the overall objective of the project, including a justification of the interdisciplinary nature of the work.
- Each student shall meet with the Project Advisor(s)regularly as per the weekly Time-Table. Other meetings may be scheduled at the discretion of the Project Advisor(s) at mutually agreed upon timings.
- Typically, the progress will include a combination of industrial and academic mentoring , self study sessions, case studies, trend studies, presentation by students, interactive sessions, industrial visits etc.
- Regular submission of progress reports shall be required of each student-group as notified through the Project Advisor(s) from time to time.

Mode of Evaluation

Students will be evaluated by team participation and a team presentation at the end of the project. Interactive & continuous, task/assignment- based evaluation methodology will be applied for the course.

EVS11109	**Environmental studies**	**L**	**T**	**P**	**C**
Version 1.1	**Contact Hours – 30**	2	0	0	2
Pre-requisites/Exposure	--				
Co-requisites	--				
Academic year	2020-21				

Course Objectives:

1. To impart basic knowledge about the environment and its problem.
2. To create awareness and concern about environmental resources protection.
3. To feel connected to the intrinsic relation between humans and environment, our position in the ecosystem around us.
4. To make the students familiar with the good civic practices and policies pertaining to environment.
5. Understanding multidimensional complex nature of environmental problems and policies.
6. To motivate students for active participation in minimizing the environmental damage caused due to our action.

Course Outcomes

On completion of this course the students will be able to:

CO 1: Distinguish between various types of ecosystems, ecosystem dynamics, perceive and appreciate the surrounding nature.

CO 2: Feel connected with the intrinsic relation between humans and environment, our position in the ecosystem around us, and importance of biodiversity.

CO 3: Comprehend the presence of various pollutants, their significance, and impacts, and develop the underlying concepts involved in various air pollution prevention and mitigation measures.

CO 4: Understand the basic science which can explain the phenomena occurring around us.

CO 5: Build the in-depth knowledge about natural resources including energy resource.

CO 6: Understand the legal framework in our country for safeguarding the environment including pollution prevention, control, management, and wildlife management.

Course Description:

We can survive without everything except food, which includes fuel and other nutrients and oxygen. For these two basic requirements, we must depend on our environment. But, over exploitation of resources, polluting the media around us, has resulted in environmental backlashes of both global and local scales. We are going through the sixth mass extinction event, the Holocene Extinction, which makes studying this subject as a compulsory course even more relevant, to develop the students into responsible citizens of the future.

Course content

Unit I: Fundamentals of Environmental studies (2 hrs)

Multidisciplinary nature of environmental studies; scope and importance; need for public awareness; concept of sustainability and sustainable development

Unit II : Natural Resources (5hrs)

Renewable and non-renewable resources; Forest resources: Use and over-exploitation, deforestation, case studies. Timber extraction, mining, dams and their effects on forest and tribal people, Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dams-benefits and problems, Mineral resources: Use and exploitation, environmental effects of extracting and using mineral resources, case studies, Land resources: Land as a resource, land degradation, soil erosion and desertification, Energy Resources: renewable and nonrenewable energy resources, fossil fuel types and their environmental impact, solar, wind, hydropower, biomass energy and geothermal energy

Unit III: Ecosystems& Biodiversity (5 hrs)

Concept of an ecosystem, Structure and function of an ecosystem, Producers, consumers and decomposers, Food chains, food webs and ecological pyramids, Energy Flow

Levels of Biodiversity: genetic, species and ecosystem diversity, Values of biodiversity, India as a mega-diversity nation, Biodiversity hotspots, Threats to Biodiversity, In-situ and Ex-situ conservation of Biodiversity

Unit – IV:Environmental Pollution (8hrs)

Environmental pollution: types, causes, effects and controls; Air, water and noise pollution, Pollution case studies

Unit – V: Global Issues and Environmental Policies (5 hrs)

Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents.

Environment Laws: Environment Protection Act; Air (Prevention & Control of Pollution) Act; Water (Prevention and control of Pollution) Act; Wildlife Protection Act; Forest Conservation Act. International agreements: Montreal and Kyoto protocols and Convention on Biological Diversity (CBD).

Unit –VI: Human Population and the Environment (5hrs)

Human population growth: Impacts on environment, human health and welfare. Environmental movements: Chipko, Silent valley, Environmental ethics: Role of Indian and other religions and cultures in environmental conservation. Sustainable development, Water conservation, rain water harvesting, watershed management; its problems and concerns. Environmental communication and public awareness, case studies; Swachh Bharat Mission

Text Books:	
1.	Principles of Environmental Science, 4th edition by Cunningham, W.P. and Cunningham, M.A. (2002), Tata McGraw-Hill Publishing Company, New Delhi
2.	Basic Environmental Engineering & Elementary Biology by MonidranathPatra and Rahul Kumar Singha, Aryan Publishing house

3.	Introduction to Environmental Engineering and Science, by Masters, G.M., Prentice Hall of India, Second Indian Reprint.
Reference Books:	
1	Wastewater Engineering: Treatment and Reuse, 4th Edition, Metcalf and Eddy, Inc. McGraw-Hill, Inc., New York, 2002
2	Environmental Engineering", Howard S. Peavy, Donald R. Rowe and George Tchobanoglous, McGraw-Hill Education (India) Private Limited, New Delhi
3	Introduction to Environmental Engineering, 2nd Ed. by Davis, M. L. and Cornwell D. A. McGraw Hill, Singapore.
4	Environmental Sciences: The Environment and Human Impact by Jackson, A.R.W. and Jackson, J.M., , Longman Publishers

Modes of Examination: Assignment/Quiz/Project/Presentation/Written Exam
Examination Scheme:

Components	Internal	Mid Term	End Term
Weightage (%)	30	20	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Programme Outcomes**
CO1	Distinguish between various types of ecosystems, ecosystem dynamics, perceive and appreciate the surrounding nature.	**PO4, PO5**
CO2	Feel connected with the intrinsic relation between humans and environment, our position in the ecosystem around us, and importance of biodiversity.	**PO4, PO6**
CO3	Comprehend the presence of various pollutants, their significance, and impacts, and develop the underlying concepts involved in various air pollution prevention and mitigation measures.	**PO5, PO7**
CO4	Understand the basic science which can explain the phenomena occurring around us.	**PO6**
CO5	Build the in-depth knowledge about natural resources including energy resource.	**PO6**
CO6	Understand the legal framework in our country for safeguarding the environment including pollution prevention, control, management and wildlife management.	**PO4, PO5**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	: Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up	Development of entrepreneurial skillsand spirit.	Develop competencies to be socially responsible business professionals
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO3
EVS11109	**Environmental Studies**				3	3	3				

1=weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	ADAMAS UNIVERSITY PURSUE EXCELLENCE

Course: EVS11109 – Environmental studies
Program: BBA **Semester: II**
Time: 03 Hrs. **Max. Marks:50**

Instructions:
Attempt any **five questions** from **Section A** (Each Carrying 2 Marks); any **four questions** from **Section B** (Each Carrying 5 Marks)**.** Any **two question from Section C** (Carrying 10 Marks)**.**

SECTION A (Answer any five questions) (5 x 2 = 10)

1.	What information about any ecosystem are conveyed by ecological pyramids?	Analysing	**CO1**
2.	What is ecological succession?	Remembering	**CO1**
3.	What is the importance of healthy DO levels in water?	Understanding	**CO3**

4.	Mention few problems associated with large dams?	Applying	**CO2**
5.	What are the different types of wind turbine?	Remembering	**CO5**
6.	What is "fossil fuel"? Provide examples.	Remembering	**CO4**
SECTION B (Attempt any **four questions) (4 x 5 =20)**			
1.	Name any two important indoor air pollutants? What is the full form of PAH and POP? What are point and non-point sources of air pollution. Give examples. (1+1+3=5)	Remembering	**CO3**
2	What is salinity? What is the unit of salinity? How can aquatic ecosystems be classified based on their salinity? (1+1+3=5)	Understanding	**CO4**
3.	Differentiate between habitat and niche. What is an ecotone and why is it significant? Give an example of an ecotone. (2+2+1=5)	Understanding	**CO1**
4.	Describe the distribution of water resources.	Remembering	**CO2**
5.	Discuss the importance of forest resources.	Evaluating	**CO5**
SECTION C (Attempt any **one question**) **(2 x 10 = 10)**			
1.	Describe the chronology of development of the silent valley movement.	Remembering	**CO6**
2.	How does hydroelectricity get produced in hydroelectric power plant? What are the advantages and disadvantages of hydroelectric energy? (5+5=10)	Understanding	**CO5**

ENG11052	**Business English II**	L	T	P	C
Version 1.0	Contact Hours-30	2	0	0	2
Pre-requisites/Exposure	Basic Knowledge of English Language				
Co-requisites	-				

Course Objectives

1. To help the second language learners develop the ability to understand spoken language.
2. To enable students communicate with clarity and precision at workplace.
3. To give the students a perspective to appreciate life in its variables by exposing them to comprehension texts; and also to enrich their word power.
4. To enable students acquire structure and written expression required for their profession.

Course Outcomes

On completion of this course, the students will be able to

CO1. Demonstrate a better understanding of the communication process by identifying, explaining, and applying current communication theories
CO2. Comprehend the complexities inherent in the grammatical aspects and complex nuances of the language
CO3. Develop a greater awareness of features of the speech stream, to be able to comprehend different accents and to be familiar with the various theoretical aspects of listening
CO4. Acquire fluency in spoken aspect of business communication and speak in an impromptu manner
CO5. Demonstrate a comprehensive and cohesive acquisition of writing skills (along with its necessary sub-skills) in formal and functional contexts

Course Description

This is a continuation of Business English II. Like the previous course, this course too focuses on improving LSRW skills, i.e. listening, speaking, reading and writing. Students will not only learn how to communicate effectively, but also equip themselves with professional skills, which will help them to be more job-ready and industry-friendly. Classroom activities will be designed to encourage students to play an active role in the construction of their own knowledge and in the design of their own learning strategies. We will combine traditional lectures with other active teaching methodologies, such as group discussions, cooperative group solving problems, analysis of video scenes and debates. Class participation is a fundamental aspect of this course. Students will be encouraged to actively take part in all group activities and to give an oral group presentation. Students will be expected to interact with media resources, such as, web sites, videos, DVDs, and newspapers etc.

Course Content

Unit 1: Communication: **8 Hrs**

a) Theories of Communication

Symbolic Interaction Theory, Social Penetration Theory, High Culture-Low Culture Context

b) Models of communication

Unit II: Grammar and Syntax: **8 Hrs**

a) Kinds of sentences

b) Phrases and Clauses

c) Conjunctions and participles

d) Degrees of comparison

e) Subject-verb agreement

f) Narration

Unit III: Reading and Listening skills: **8 Hrs**

a) Types of reading

b) Pronunciation skills

c) Barriers to effective listening

d) Reading and listening exercises

Unit IV: Speaking skills **8 Hrs**

Group Discussion, Small skits, Role play, Interview

Unit V: Writing Skills **8 Hrs**

Email, Minutes, Memo /Notice, Letter writing

Text Books

T1. Kaul Asha. Effective Business Communication. PHI Learning Pvt Ltd. 2014.
T2. Wren and Martin. High School Grammar And Composition. S. Chand, 1995.
T3. Lewis, Norman. Word Power Made Easy. Anchor: 2014.
T4. Riordan, Daniel G & Pauley Steven A. : Technical Report Writing Today. 2004.

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

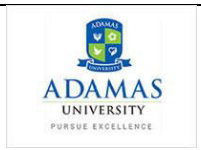
Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Demonstrate a better understanding of the communication process by identifying, explaining, and applying current communication theories	**PO6**
CO2	Comprehend the complexities inherent in the grammatical aspects and complex nuances of the language	**PO6** **PO7** **PSO1**
CO3	Develop a greater awareness of features of the speech stream, to be able to comprehend different accents and to be familiar with the various theoretical aspects of listening	**PO3** **PO6**
CO4	Acquire fluency in spoken aspect of business communication and speak in an impromptu manner	**PO2** **PO3** **PO7**
CO5	Demonstrate a comprehensive and cohesive acquisition of writing skills (along with its necessary sub-skills) in formal and functional contexts	**PO3** **PO5**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take **up**	Development of entrepreneurial skills and spirit.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
ENG11052	Business English II	-	-	3	-	-	3	3	-	-	-

1=weakly mapped
2= moderately mapped
3=strongly mapped

Model Question Paper

Name: **Enrolment No:**	

Course: ENG11052 BUSINESS ENGLISH – II

Program: BBA **Time: 03 Hrs.**

Semester: II **Max. Marks: 50**

Instructions:

Attempt any **Four Questions** from **Section A** (each carrying 5 marks); any **Three Questions** from **Section B** (each carrying 10 marks)**.**

	Section A (Attempt **any Five)**		
1.	Define primary and secondary stress with suitable examples. (Re)	**5**	**CO3**
2.	Discuss any five features of Schramm's Model of Communication. (Re)	**5**	**CO1**
3.	Change the following sentences into indirect speech: (Ap) a) I said to the girl, "When does the next train come in?" b) The spectators said, "Bravo! Well played, Pankaj." c) The Students said, "How tough the paper is!" d) The teacher said to the class, "I shall prove now that the earth moves round the sun." e) Rahul said, "Let me have some tea."	**5**	**CO2**
4.	How is Interactive model of communication different from other models of communication? (Un)	**5**	**CO1**
5.	How should you prepare for an online interview? (Un)	**5**	**CO4**
6.	What are the different types of sentences? Illustrate with examples. (Re)	**5**	**CO1**
	SECTION B		
8.	What is the significance of voice quality in speaking? How can you develop it? (Ap)	**10**	**CO1**
9.	Discuss the etiquettes that are to be followed while appearing for a job interview. (Un)	**10**	**CO4**
10.	Write a short paragraph (in not more than 500 words) on Importance of language in marketing. (Ap)	**10**	**CO5**
11.	How do you plan an oral presentation? Discuss the steps involved in it. (Ap)	**10**	**CO4** **CO5**

Course Code- EIC11001	Venture Ideation	L	T	P	C
Version 2.0		2	0	0	2
Pre-requisites/Exposure	Basic knowledge of English and computer applications such as Internet Explorer and MS Office				
Co-requisites	--				

Course Objectives

1. To help the students understand the way to be an Entrepreneur
2. To identify the right business opportunity
3. To empower students to perform a technical feasibility study and thereby developing a prototype
4. To help students in identifying their customers using primary and secondary research methods.
5. Expose students to various factors of market and competition with the help of market feasibility study, forecasting techniques, business model canvass and insights about financial statements.
6. To prepare students with finalizing their entrepreneurial Portfolio

Course Outcomes

On completion of this course, the students will be able to:

CO1. Assess personal capacity in the context of the entrepreneurial process
CO2. Assess characteristics of successful entrepreneurs and entrepreneurial forms and processes
CO3. Apply resources, research and tools for Entrepreneurial ventures
CO4. Analyze and apply opportunity identification techniques, feasibility terminology, processes and models
CO5. Develop Ideation and planning documents for entrepreneurial venture

Catalog Description

Over the last decade, the core of our economy has been transitioning from one of industrial might, large monolithic corporations and mass production towards one of networks, flexible enterprises comprising many smaller units and unique value. This new economy is based on innovation originating in creativity and design; it is also disrupting long-standing and established employment patterns and bringing to the fore the importance of entrepreneurship. This core unit will bring together creativity, design and entrepreneurship at the conceptual and more practical level. It aims to explore the nature, determinants and consequences of creativity, design and entrepreneurship as well as the interaction between them.

Course Content

Unit 1. Introduction **6 hours**

Preview of the Course, Introduction to the Course, Guest Lecture with U.S. Secretary of Commerce Penny Pritzker – Meaning of Innovation, Entrepreneurial opportunities, Factors influencing the feasibility of an innovation, Innovation strategy: technology-push or market-pull, Product-market fit, How to develop a business model, Walkthrough of the business model canvas, Welcome to Innovation for Entrepreneurs: From Idea to Marketplace.

Unit 2. Customer Discovery and Validation **6 hours**

Customer types, Customer archetypes, Customer segments and business models, Customer segments, value propositions, product features, value mapping, interviewing customer, insights of your customers.

Unit 3: Product Understanding and Marketing. **6 hours**

Customer value, The DNA of customer-centricity, Crossing the chasm, Qualitative and quantitative marketing research, importance and methods of market segmentation, Focusing on the target market, Beyond the chasm, Strategic implications of beyond the chasm, E-commerce: The internet as a selling platform.

Unit 4. Prototyping and Testing. **6 hours**

Planning for prototyping, Rapid prototyping and development, Lean startup MVPs, Choosing a wire framing/UX prototyping tool, Anatomy of an experience map, What you'll learn from user testing, Analytics and insight, Troubleshooting your customer discovery, Levels of a product/service.

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination

Examination Scheme:

Components	Continuous Assessment (course era)	**Summative Assessment (Video pitch for a business venture concept, Business model for a start-up using theories on creativity, design and entrepreneurship.)**
Weightage (%)	50 %	50 %

Relationship between the Program Outcomes (POs), Program Specific Outcomes (PSOs) and Course Outcomes (COs)

CO/PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
CO1	-	-	-	-	-	2	-	-	-	-	2	-	-	-
CO2	-	-	-	-	-	3	-	-	-	-	3	-	-	-
CO3	-	-	-	-	-	3	-	3	-	-	3	-	-	-
CO4	-	-	-	-	-	2	-	3	-	-	3	-	-	-
CO5	-	-	-	-	-	3	-	3	-	-	2	-	-	--
Average	-	-	-	-	-	2.6	-	3	-	-	2.6	-	-	--

1=Weakly mapped 2= Moderately mapped 3=Strongly mapped

Semester – II

FAC11005	Financial Accounting	L	T	P	C
Version **1.0**	**Contact Hours - 40**	**3**	**1**	**0**	**4**
Pre-requisites/Exposure	Basic knowledge of Accounting				
Co-requisites					

Course Objectives

01	This course will enable the students to prepare accounting records for partnership firms in case of admission, retirement and death.
02	This course will enable the students to prepare accounting records for partnership firms in case of dissolution.
03	The course will help the students in preparing accounting records for consignment.
04	This course will enable the students to understand the difference between hire purchase and installment payment system and also do accounting for the same.
05	This course will enable the students to prepare branch and departmental accounts.

Course Outcomes

On completion of this course the students will be able to:

CO1	**Prepare** accounting records for partnership firms in case of admission, retirement and death.
CO2	**Prepare** accounting records for partnership firms in case of dissolution.
CO3	**Understand** the concept of and accounting treatment for consignment.
CO4	**Understand** the difference between hire purchase and installment payment system and also do accounting for the same.
CO5	**Prepare** branch and departmental accounts.

Course Description

This course covers the accounting treatment of partnership firms in the event of admission, retirement or death of a partner and also covers the accounting treatment needed in case of dissolution of a partnership firm. It introduces accounting treatments relating to consignment and hire purchase. It also covers branch and departmental accounting.

Course Contents

Unit-1	**Partnership Accounts**	**(15 L)**

P/L Appropriation account; Capital & Current account; Guarantee – by firm, by partner and both; correction of appropriation items with retrospective effect. Change in constitution of firm – change in P/S ratio, admission, retirement and retirement cum admission – treatment of Goodwill, revaluation of assets & liabilities (with/without alteration of books), treatment of reserve and adjustment relating to capital; treatment of Joint Life Policy, Death of a partner.

Unit-2	**Dissolution of a Partnership**	**(5 L)**

Dissolution of a Partnership – Accounting for dissolution of firm – Insolvency of one or more partner, consideration of private estate and private liabilities; Piecemeal distribution – surplus capital basis; maximum possible loss basis.

Unit-3	**Consignment**	**(5 L)**

Consignment: Basic features; difference with sales; Recording in the books of Consignor – at Cost & at invoice price, Valuation of unsold stock; Ordinary commission, treatment and valuation of abnormal & normal loss, Special commission; Del credere commission (with and without bad debt) - use of Consignment Debtors A/C, Recording in the books of Consignee		
Unit-4	**Hire purchase and Installment payment system**	**(10 L)**
Meaning; difference between Hire purchase and Installment payment system; Recording of transactions in the books of buyer – allocation of interest –use of Interest Suspense a/c – partial and complete repossession in the books of seller – Stock and Debtors a/c (with repossession) in the books of seller – H.P. Trading a/c (with repossession) – Operating and Financial Lease (basic concept only).		
Unit-5	**Branch and Departmental Accounts**	**(13 L)**
Branch: Dependent branches - Stock and Debtors system -Distinction between wholesale profit and retail profit - Independent branch (including foreign branches). Departmental accounts: Concept, difference between Branch and Department, objectives of preparation of departmental accounts - apportionment of common costs; Preparation of Departmental Trading and P/L account, Consolidated Trading and P/L account; inter-departmental transfer of goods at cost, cost plus, and at selling price - Elimination of unrealized profit.		

Suggested Readings:

Text Books:

1. Hanif & Mukherjee, Financial Accounting, Volume II, TMH
2. Jain & Narang, Financial Accounting, Kalyani Publishers, New Delhi
3. Shukla & Grewal, Advanced Accounting, S. Chand, New Delhi

Reference Books:

4. T. S. Reddy & A. Murthy, Financial Accounting, Margham Publications
5. Mukherjee and Mukherjee, Financial Accounting Volume I, Oxford Publication
6. Hanif & Mukherjee, Modern Accountancy, Volume II,TMH
7. Arora, Achalapathi and Brinda, Financial Accounting, Taxmann Publication

Modes of Examination: Assignment/Quiz/Project/Presentation/Written Exam

Examination Scheme:

Components	Internal	Mid Term	End Term
Weightage (%)	**30**	**20**	**50**

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos

	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	**Prepare** accounting records for partnership firms in case of admission, retirement and death.	**PO2, PO3**
CO2	**Prepare** accounting records for partnership firms in case of dissolution.	**PO1, PO2, PO3**
CO3	**Understand** the concept of and accounting treatment for consignment.	**PO2, PO4, PO5**
CO4	**Understand** the difference between hire purchase and installment payment system and also do accounting for the same.	**PO2, PO4, PO5**
CO5	**Prepare** branch and departmental accounts.	**PO1, PO2**

		Holistic overview on Trade and Commerce	Expertise in Accounting and Management Accounting	Specific Trade and Commerce practices	Knowledge on BIFS	Analytical skills for Decision Making and Research
Course Code	**Course Title**	**PO1**	**PO2**	**PO3**	**PO4**	**PO5**
FAC11005	**Financial Accounting**	**2**	**3**	**2**	**2**	**2**
1=Weakly mapped	2=Moderately mapped	3=Strongly mapped				

BAN13002 SQL

Course Structure:

Unit 1: Basic Concepts

- Microsoft SQL Server
- What is SQL?
- What are Relational Databases?

Unit II: The Graphic User Interface

- Object Explorer
- Query Window
- Results Grid
- Options

Unit III: The Code

- Basic Clauses
- Field and Table Aliases
- Creative use of Aliases
- Inner Table Joins
- Aggregations
- Distinct Records
- Text Criteria & Operators
- Wildcard Filters

Course Outcome for BAN11002

CO- BAN11002 -1	The course will help to impact knowledge on different terminology in SQL
CO- BAN11002 -2	Students should be able to identify the basics of different components of SQL
CO- BAN11002 -3	It will help to understand the SQL process
CO- BAN11002 -4	The course can help the students to implement SQL in business.

Suggested Readings:

SQL QuickStart Guide: The Simplified Beginner's Guide to Managing, Analyzing, and Manipulating Data With SQL by Walter Shields

Course Code IDP14001	Inter-Disciplinary Project	L	T	P	C
Version 1.0		-	-	-	3
Pre-requisites/Exposure	Knowledge of Basic English				
Co-requisites	Knowledge of Basic Computer Skills				

Course Objectives

This course will develop a student's knowledge of and appreciation for the

- interdisciplinary nature of knowledge and learning
- importance and value of integrating knowledge and perspectives from multiple disciplines as a means to evaluating and understanding complex topics, problems, issues, phenomena, and events
- competencies learned during the educational process and to apply these competencies in a real-world application

CourseOutcomes

Upon successful completion of the course, students will be able to

CO1. recognize the unique advantages of integrative research and learning
CO2. understand the fundamentals of research methods and practices of various academic disciplines
CO3. demonstrate an understanding of current issues and concerns
CO4. realize the importance of ethics in research process
CO5. understand the inter-disciplinary systems of research documentation

Typical Progress Roadmap

- After discussion with the Project Advisor(s), each student shallprepare an initial outline of their assigned project indicating the major sections of discussion, list the principal research sources for each section, and explain the overall objective of the project, including a justification of the interdisciplinary nature of the work.
- Each student shall meet with the Project Advisor(s)regularly as per the weekly Time-Table. Other meetings may be scheduled at the discretion of the Project Advisor(s) at mutually agreed upon timings.
- Typically, the progress will include a combination of industrial and academic mentoring , self study sessions, case studies, trend studies, presentation by students, interactive sessions, industrial visits etc.
- Regular submission of progress reports shall be required of each student-group as notified through the Project Advisor(s) from time to time.

Mode of Evaluation

Students will be evaluated by team participation and a team presentation at the end of the project. Interactive & continuous, task/assignment- based evaluation methodology will be applied for the course.

SOC14100	**Community Service**	L	T	P	C
Version 1.0		-	-	-	1
Pre-requisites/Exposure	Knowledge of Basic English				
Co-requisites	Knowledge of Basic Computer Skills				

Course Objectives

1. To familiarise the students on the concept'giving back to the society'.
2. To familiarize the students on the issues faced by marginalized communities.
3. To provide an experiential platform to the students on any one or two issues as an internship.

Course Outcomes

On completion of this course, the students will be able to

CO1: Understand the concept of social responsibility through an internship.
CO2: Acquire hands on experience in 'giving back to the society' through the concept of social responsibility through an internship.

Catalog Description

Along with Intelligent Quotient, it is important for students to enhance their Emotional Quotient as well. The Social Internship offers opportunity to the student to be empathetic towards social issues facing our society. To help and support the affected community / cause through a field internship is the essence of the course in 'giving back to the society'.

Course Content

Unit I:

Introduction to the course. A brief on social issues facing the society with both global and Indian examples.

Unit II:

Minimum 24 hours of field work on a social issue and helping the marginalized / affected community / cause with photographs and testimonies.

Unit III:

Submission of individual reflection on the social service rendered.

The benefits that accrue to the students are

A.) Subjective

1. Psychosomatic benefits: Volunteering increases overall life satisfaction and also helps to relive stress and acts as an anti-depressant.
2. Intellectual benefits: Enhances knowledge through new experiences, and develops communication skills.
3. Career benefits : Enhances career prospects by acquisition of work-related skills, builds good references for employers and provides a forum to network with future

potential employers. It also The experience allows gained helps students to take up leadership positions. Letters of recommendation can also be easily sought. Research shows that students who indulge in volunteer word perform better in studies as it invigorates their passion for learning

4. Personal benefits : Real world skills like leadership, problem-solving, collaboration with others, time management and communication skills, learn patience and empathy.
5. Connect learning to real world and enables deeper and lifelong learning.

B.) **Community**

1. Collective benefits: Strong interpersonal bonds are created, and leads to increased civic and social awareness and responsibility.

Further Reading :

1. Tadevosyan, Gohar &Schoenhuth, Michael. Participatory Research Approach : Principles, Challenges and Perspectives. http://ysu.am/files/01G_Tadevosyan_M_Schoenhuth.pdf
2. Bergold, Jarg& Thomas Stefan. Participatory Research Methods: A Methodological Approach in Motion http://www.qualitative-research.net/index.php/fqs/article/view/1801/3334

Plan of Work

1. Reading on social issues facing the society with both global and Indian examples.
2. Selecting an issue where the student wishes to contribute and wants to make a difference.
3. Areas - The internship may be broadly completed by getting in touch with NGO in your city / town / Police / Municipal Corporation / Local Gram Panchayat / Hospital / State Health Department / Women & Child Development Centre / CSR departments of Corporates /school / Old Age Home / Orphanage / Literacy Drive / Aanganwadi Centres / etc.
4. **Online Discussion –** Throughdiscussion, students elaborate their preferred area of work with reference to the Global Scenario and India. Reason for choosing that area also needs and resources of the people in their area of Social Internship and also submit the testimonials, which include signature of the authority where students initiated theirwork, or the signature of the authority in whose area students are currently working or photographs of work (photographs must include students working).
5. **Final Report Submission** - Submission of theTestimonials include signatures of the authorities you have worked with, or the signature of the authority in whose area you have worked or photographs of your work (photographs must include you working). Students' accomplishment in their area of operation along with the major successes student experienced and major challenges faced.
6. Students will submit the complete elaborated report along with testimonials and completion certificate in the form of signed Template

- The registration for all students will open twice, during winter and summer breaks. They may enroll for the internship in either of the two breaks.
- The student will have to submit a continuous record of their 10 to 15 days internship in the form of photographs and testimonies (wherever required).

Mode and Scheme of Online Evaluation:

Modes of Evaluation: Online – Quiz / Assignment / Discussions / Case Studies
Examination Scheme:

Components	**MSE** **(Discussion + Initiating Internship Template)**	**MSE III** **(Detailed Assignment – Report Submission + Testimonials Photograps/Videos) Student Experience Sharing Video**	**ESE**
Weightage (%)			

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Understand the concept of social responsibility through an internship.	**PO6, PSO3**
CO2	Acquire hands on experience in 'giving back to the society' through the concept of social responsibility through an internship.	**PO6, PSO3**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take **up**	Development of entrepreneurial skills and spirit.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO 1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PSO3
SOC14100	Community Services	-	-	-	-	-	3	-	-	-	3

FAC11007	**Financial Management**	**L**	**T**	**P**	**C**
Version 1.1	**Contact Hours - 60**	3	1	0	4
Pre-requisites/Exposure	Understanding basic financial terms				
Co-requisites	--				
Academic year	2020-21				

Course objectives:

1. Provide an in-depth view of the process in financial management of the firm
2. Develop knowledge on the allocation, management and funding of financial resources.
3. Improving students' understanding of the time value of money concept and the role of a financial manager in the current competitive business scenario.
4. Enhancing student's ability in dealing short-term dealing with day-to-day working capital decision; and also longer-term dealing, which involves major capital investment decisions and raising long-term finance

Course Outcomes

On completion of this course, the students will be able to:

CO1: Explain the concept of fundamental financial concepts, especially time value of money

CO2: Apply capital budgeting projects using traditional methods.

CO3: Analyze the main ways of raising capital and their respective advantages and disadvantages in different circumstances

CO4: Integrate the concept and apply the financial concepts to calculate ratios and do the capital budgeting

Course Description:

Finance considers the requirements for financial information both external and internal to the organisation and the role of finance professionals as key players in a dynamic and ever-changing business environment, encompassing key decisions and the fundamental principles of Business. Classroom activities including lectures, discussions and case studies (topped up with role play) will be designed to encourage students to get involved, absorb and assimilate inputs. These activities will also be supplemented by group discussions, cooperative group solving problems, live projects, analysis of video cases and debates. Class participation is a fundamental aspect of this course. Students will be encouraged to actively take part in all

group activities and to give an oral group presentation. Students will be expected to interact with media resources, such as, web sites, videos, and newspapers etc.

Course Structure

Unit 1: Nature of Financial Management **10L**

Finance and related disciplines; Scope of Financial Management; Profit Maximization, Wealth Maximization - Traditional and Modern Approach; Functions of finance – Finance Decision, Investment Decision, Dividend Decision; Objectives of Financial Management; Organization of finance function; Concept of Time Value of Money, present value, future value, and annuity.

Unit 2: Risk & Return **10L**

Historical return, expected return, absolute return, holding period return, annualized return, arithmetic & geometric return; Risk - Systematic & unsystematic risk – their sources and measures.

Unit 3: Long -term investment decisions **10L**

Capital Budgeting - Principles and Techniques; Nature and meaning of capital budgeting; Estimation of relevant cash flows and terminal value; Evaluation techniques - Accounting Rate of Return, Net Present Value, Internal Rate of Return & MIRR, Net Terminal Value, Profitably Index Method.

Unit 4: Concept and Measurement of Cost of Capital **10L**

Explicit and Implicit costs; Measurement of cost of capital; Cost of debt; Cost of perpetual debt; Cost of Equity Share; Cost of Preference Share; Cost of Retained Earning; Computation of over-all cost of capital based on Historical and Market weights. Capital Structures: Approaches to Capital Structure Theories - Net Income approach, Net Operating Income approach, Modigliani-Miller (MM) approach, Traditional approach, Capital Structure and Financial Distress, Trade-Off Theory.

Unit 5: Dividend Policy Decision **10L**

Dividend and Capital; The irrelevance of dividends: General, MM hypothesis; Relevance of dividends: Walter's model, Gordon's model; Leverage Analysis: Operating and Financial Leverage; EBIT -EPS analysis; Combined leverage.

Unit 6: Working Capital Management **10L**

Management of Cash - Preparation of Cash Budgets (Receipts and Payment Method only); Cash management technique, Receivables Management – Objectives; Credit Policy, Cash Discount, Debtors Outstanding and Ageing Analysis; Costs - Collection Cost, Capital Cost, Default Cost, Delinquency Cost, Inventory Management (Very Briefly) - ABC Analysis; Minimum Level; Maximum Level; Reorder Level; Safety Stock; EOQ, Determination of Working Capital.

Text Book(s):-

1. Financial Management by I M Pandey (Vikas Publication)

Reference Book(s):-

1. Bhalla, V.K. (2009). *Financial Management.* New Delhi: Anmol Publications
2. Brealey, R. R., Myers. S., Allen, F., & Mohanty, P. (2009). *Principles of corporate finance* (8th ed.). New Delhi: Tata Mc-Graw Hill.
3. Brigham, E F., & Davis, P. (2009). *Intermediate financial management* (10th ed.). USA: South Western.
4. Brigham, E. F., & Houston, J. F. (2007). *Fundamentals of financial Management* (11th ed.). USA: Thomson.
5. Chandra, P. (2008). *Financial management* (7th ed.). New Delhi: Mc-Graw Hill
6. Hickman, K. A., Hunter, H. O., & Byrd, J. W. (2008). *Foundations of corporate finance* (2nd ed.). USA: South Western.
7. Horne, V. (2008). *Fundamentals of financial Management* (12th ed.). New Delhi: Pearson Education.

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination
Examination Scheme:

Components	Mid Term	Attendance	Class Assessment	End Term
Weightage (%)	20	00	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Explain the concept of fundamental financial concepts, especially time value of money	**PO1, PO 2**
CO2	Apply capital budgeting projects using traditional methods.	**PO1,PO2, PO3, PO 7, PSO1**
CO3	Analyze the main ways of raising capital and their respective advantages and disadvantages in different circumstances	**PO2, PO4, PO 7, PSO1**
CO4	Integrate the concept and apply the financial concepts to calculate ratios and do the capital budgeting	**PO1, PO6, PO7**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	: Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up	Development of entrepreneurial skills and spirit	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO3
FAC11007	Financial Management	3	3	-	-	-	-	3	3	-	

1= weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	

Course: FAC11007– Financial Management

Program: BBA **Semester: III**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

SECTION A (Answer All Questions)

1.	Write down the formula for PVIFA and FVIFA.	Remembering	**CO1**
2	A project costs Rs.4000 and the cash inflows for next 2 years are 2000 and 2500. If the discount rate is 10%, find the Net Present Value (NPV) of the project.	Understanding	**CO1**
3	Define profitability index. Give an example.	Remembering	**CO2**
4	Define debt equity ratio, working capital ratio, interest coverage	Remembering	**CO1**

	ratio and Quick ratio.		
5	How do you calculate return of an equity share?	Remembering	**CO1**
	SECTION B		
1.	Initial outlay of a project is Rs.1, 00,000 and it can generate cash inflow of Rs.40000, Rs.30000, Rs.50000 and Rs.20000 for the next 4 years. Assume a 10% rate of interest, calculate the profitability index.	Understanding	**CO2**
2	Find the effective rate of interest when the nominal rate of interest is 12% compounded yearly, semi-annually, quarterly and monthly.	Understanding	**CO1**
3.	You buy a house of Rs. 5 lakhs and immediately make a cash payment of Rs. 1 lakh. You take a loan for the balance amount at 12% for 20 years. How much is the annual instalment?	Analyzing	**CO3**
4.	An investment will see a return of Rs.2000 at the end of each year for the next 3 years and Rs.1000 at the end of each year from year 4 to 7. What is the investment amount at the beginning if the required rate of return is 13%?	Analysing	**CO3**
	SECTION C (Attempt any **Two Questions**)		
1.	Suppose a firm is expecting a perpetual net operating income of Rs.150 crore on assets of Rs.1500 crore which are entirely financed by equity. The firm's equity capitalization rate is 10%. The firm is considering to substitute the equity capital by issuing perpetual debentures of Rs.300 crore at 6% interest rate. The cost of equity is expected to increase to 10.56%.The firm is also considering raising perpetual debentures of Rs.600 crore and replacing equity. The debt-holders will charge interest of 7% and the cost of equity will rise to 12.50% to compensate shareholders for higher financial risk. Calculate the a) total value of the firm for all three scenarios b) WACC in all these three scenarios c) Draw the cost of capital graph explaining all three stages (increasing, optimum and declining value).	Applying	**CO4**
2.	A project costs Rs40,000.Its stream of earnings before depreciation, interest and taxes (EBDIT) from 1 to 5 years is expected to be Rs.10000,Rs.12000,Rs.14000,Rs.16000 and Rs.20000. Assume a 50% tax rate and depreciation on straight line basis, calculate the project's Accounting rate of return. ?	Applying	**CO4**

3.	A project costs Rs.16000 and is expected to generate cash inflows of Rs.8000, Rs.7000 and Rs.6000 at the end of each year for next 3 years. Find the internal rate of return (IRR) of the project.	Creating	**CO4**

OBH11012	**Human Resource Management**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 60**	3	1	0	4
Pre-requisites/Exposure	Understanding of the general principles of management				
Co-requisites	Understanding of Organization Behaviour and Business Communication				
Academic Year	2020-2021				

Course Objectives:

The objective of the course is to educate the student such that he/she understands:

1. To enable the students to understand the HR management and system at various levels in general and in certain specific industries or organizations.
2. To help the students focus on and analyse the issues and strategies required to select and develop manpower resources.
3. To develop relevant skills necessary for application in HR related issues.
4. To enable the students to integrate the understanding of various HR concepts along with the domain concept in order to take correct business decisions.

Course Outcome:

On completion of this course the students will be able to:

CO 1: Discuss the concept of human resource management and its relevance in organizations.

CO2: Develop necessary skill set for application of various HR issues.

CO3: Analyse the strategic issues and strategies required to select and develop manpower resources.

CO4: Examine the knowledge of HR concepts to take correct business decisions.

Course Description:

This course provides an overview of Human Resources Management, including an historical perspective of HR, strategies for designing HR activities, and the roles and responsibilities of HR professionals. It is a prerequisite to all upper-level HR classes for majors. This course provides an introduction to the various functions of human resource management, including job analysis, job evaluation, staffing, recruitment and selection, labour relations, planning, labour welfare, human rights legislation and employment equity.

Course Contents:

Unit I: Introduction to Human Resource Management: Definition and Concept, Features, Objectives, Functions, Process, Scope of Human Resource Management, Importance of Human Resource Management, Human Resource Practices. [10 L]

Unit II: HRM and Personnel Management: Concept of Personnel Management, Personnel Management in India, Functions of the Labour Welfare Officer, Difference Between Personnel Management and HRM. [10 L]

Unit III: Human Resource Planning: Concept of Human Resource Planning (HRP), Factors in HRP, Process of HRP. [10 L]

Unit IV: Job Analysis and Design: Job Analysis, Job Description, Writing a Job Description, Job Specification, Job Design - Various Approaches. [10 L]

Unit V: Recruitment: Concept of Recruitment, Factors Affecting Recruitment, Types of Recruitment; **Selection:** Concept of Selection, Process of Selection, Selection Tests, and Barriers in Selection. [10 L]

Unit VI: Selective Cases on the above topics. [10 L]

Suggested Readings:

Text Book(s):-

T1: Aswathappa, K.: Human Resource Management, Text & Cases, McGraw Hill (India), New Delhi.

T2: Bhattacharya, D.K.: Human Resource Management.

T3: SubbaRao, P.: Essential of HRM and Industrial Relations.

T4: Memoria, C.B.: Personnel Management.

Reference Book(s) & other resources:-

1. Monappa, Arun: Managing Human Resource.

2. Monoppa & Saiyadain: Personnel Management, Tata McGraw Hill, New Delhi.

3. Patnayak, Biswajeet: Human Resource Management, Ed. 3rd, 2006, PHI, New Delhi.

4. Armstrong, Michael: A handbook of HRM practice, Kgan Page Limited, London.

5. Rao, VSP: Human Resource Management: Text and Concept, Excel Books, New Delhi.

Modes of Examination: Assignment/Quiz/Project/Presentation/Written Exam

Examination Scheme:

Components	Internal	Attendance	Mid Term	End Term
Weightage (%)	30	00	20	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	To develop the understanding of the concept of human resource management and to understand its relevance in organizations	**PO3, PO2, PSO1**

CO2	To develop necessary skill set for application of various HR issues.	**PO1,PO2, PO3, PO 6, PSO2**
CO3	To analyse the strategic issues and strategies required to select and develop manpower resources.	**PO2, PO4, PO 3, PSO1**
CO4	To integrate the knowledge of HR concepts to take correct business decisions.	**PO4, PO6, PO7, PSO2**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	: Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up	Development of entrepreneurial skillsand spirit.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO3
OBH11012	Human Resource Management	-	3	3	3	-	-	-	3	3	-

1=weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	ADAMAS UNIVERSITY PURSUE EXCELLENCE

Course: OBH11012--- Human Resource Management I

Program: BBA **Semester: III**

Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

SECTION A (Answer All Questions)

1.	What is managerial judgement method?	Remembering	**CO1**

2	Why manpower planning is important for any organization?	Remembering	**CO1**
3	Define the concept selection?	Remembering	**CO1**
4	What do you understand by job design?	Remembering	**CO1**
5	Explain the concept of succession planning?	Understanding	**CO2**
	SECTION B		
1.	Define the role of HR manager in an organization. Elucidate your answer with suitable examples.	Remembering	**CO2**
2	What is the difference between personnel management and HRM? Explain your answer.	Remembering	**CO1**
3.	Suppose HR planners estimate that because of several technological innovations your company will need 25 percent fewer employees in three years. What actions would you take today?	Understanding	**CO2**
4.	Briefly define the difference between external and internal sources of recruitment in any company. Elucidate your answer with examples.	Remembering	**CO3**
	SECTION C (Attempt any **Two Questions)**		
1.	Read the case carefully and solve the questions. Vishal Components Limited manufactures a wide range of automotive components. It has a workface of 1500 including 250 supervisors and executives. Performance appraisals of these employees are being carried out annually. The parameter used for performance appraisal is sense of responsibility, superiors' dependability on subordinates, initiative, regularity and punctuality, community activity and potential for development to take higher positions. All these factors are given equal weight age .the performance appraisal has three objectives: to grant annual increment, to determine promotability and to assess training needs. In the year 2010-11, some supervisors and executives were not given any increment because as per performance appraisal, their total scores were below standard. The overall low scores were due to community activity and potential for development which were given equal weightage along with other factors. On the stoppage of annual increment, the aggrieved supervisors and executives represented their case to the managing director of the company and contended that the entire performance appraisal system was faulty. They were very much against the inclusion of community activity and potential for development in the performance appraisal meant for giving pay raise. They argued that all aggrieved supervisors and executives should be given regular annual increments and time-bound promotions .The system would be more objective, air and free from undue biases.	Applying	**CO4**

	Questions (a) As human resource manager, how will you defend the existing performance appraisal system of the company? (b) Will you like to incorporate changes, if any? If yes, what would be these changes and why? (c) Should there be separate appraisal criteria for appraising supervisors and executives? If yes, where are such differences needs? What actions should be taken to the representation made by the aggrieved supervisors and executives?		
2.	(a) Critically examine the importance of Delphi Technique resolution technique? (b) Do you think training and development programmes are essential at all levels of management? Justify your answer with proper illustrations.	Analysing	**CO3**
3.	Read the case carefully and solve the questions. The personnel office of Prashant Chemicals limited informed the middle managers through a circular that a group of consultants would be calling on them later in the week to provide training on team building. The consultants would be emphasizing on how to develop team work and to build inter group relationships throughout the Company. The information also contained the approach to be adopted by the consultants and explained the five-step process of team building: problem sensing, examining differences, giving and receiving feedback, developing interactive skills, and follow up actions. The circular also included a note on the utility of team building in organizational effectiveness. On receiving the circular, middle managers, felt tensed as they though team building as an exercise involving a lot of hocus-pocus as they experienced in sensitivity training exercises in which participants used to attack each other and let out their aggression by heaping abuse on those disliked. Therefore, the managers felt that the consultants were not needed for team building. One of the managers commented, 'now that as we understand what is involved in team building, we can go ahead and conduct session ourselves. All we have to do is to choose a manager who is liked by everyone and put him in the role of change agent/ consultant. After all, you really do not need high priced consultants to do team building stuff. You just have a good feel for human factor'. The other managers generally agreed. However, the corporate personal director turned down their suggestion and proceeded with his original programme of hiring consultants. Questions (a) Why did middle managers show resistance to team building approach of organization development? (b) Do you think the managers had accurate view of team	Applying	**CO4**

	building concept and role of external consultant in that? (c) Did corporate personnel office sell the concept of team building and its usefulness properly to middle managers? What actions should the department have taken?		

OLS11001	**Supply chain Management**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 60**	3	1	0	4
Pre-requisites/Exposure	Basic understanding of business operation and distributions				
Co-requisites	--				

Course Objectives:

1. This course would help students develop an understanding about the role of supply chain management in business.
2. Distribution and supply chain functions, key issues of supply chain and the drivers of supply chain performance.
3. This course would also give exposure to the students with basic concepts of supply chain management for cost effective functioning of the business.
4. To provide basic knowledge of information technology application in supply chain management.

Course Outcomes

On completion of this course, the students will be able to:

CO1. Understanding the basic fundamentals of logistics and supply chain management.
CO2. Recognise the importance of inventory and its planning.
CO3. Need for warehousing, network of warehouses, and distribution centres.
CO4. Importance of transportation and its role in logistics and supply chain management.
CO5. Awareness of information technology and its application in supply chain management.

Catalogue Description:

Over the last six decades, the discipline of business logistics has advanced from the warehouse and transportation dock to the boardroom of leading global companies. Supply chain and logistics management encompasses the development and fundamental of the logistics discipline within a supply chain structure. Logistics includes all the activities required to move product and information to, from, and between members of a supply chain. The supply chain provides the framework for businesses and their suppliers to jointly deliver goods, services, and information efficiently, effectively, and relevantly to customers. Supply chain and logistics management presents the mission, business processes, and strategies needed to achieve integrated logistical management. Classroom will be interactive and encourage students to take part in the class activities. This course is designed to include

conventional lecture sessions with other modern teaching techniques such as case study, class assignments, continuous evaluation tests, and presentation on live company based case.

Course Content:

Unit 1: **15 Lecture Hours**

Introduction to Logistics and Supply Chain Management: Scope and Components of Logistics; Logistics and Marketing; Logistics Planning, Principles and focus Areas; Supply Chain Drivers and Obstacles; Demand Management and Forecasting in a Supply Chain and Supply Chain Integration.

Unit II: **15 Lecture Hours**

Managing Inventory: Inventory Planning; Managing Inventory in a Supply Chain; Factors Driving Inventory; Category and Types of Inventory ; Inventory Classifications; ABC Inventory Analysis; Inventory Costs; Inventory control and functions.

Unit III: **10 Lecture Hours**

Warehousing: Purpose and Reasons of Warehousing; Network of Warehouses; Distribution Centres; Market Positioning; Production Positioning; Intermediate Positioning.

Unit IV: **10 Lecture Hours**

Transportation: Transportation Principles; Network Design and Selection Criteria; Relative Merits Analysis; Costs Factors; Customer Service Factors; Reverse Logistics; Advantages & Disadvantages of all forms of Logistics

Unit V: **10 Lecture Hours**

Information Technology: Basic concept of information technology, Enterprise Resource Planning, Application of information technology in supply chain management.

Reference Books:

1.Janat Shah, Supply Chain Management, Pearson
2.V.V. Sople, Supply Chain Management, Pearson
3. K. Shridhara Bhat, Logistics and Supply Chain Management, e/2018, Himalaya Publishing House
4. Donald J Bowersox, David J Closs & M Bixby Cooper, Supply Chain Logistics Management, e/2019, Tata McGraw Hill education

Modes of Examination: Assignment/Quiz/Project/Presentation/Written Exam

Examination Scheme:

Components	Internal	Attendance	Mid Term	End Term
Weightage (%)	30	00	20	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Understanding the basic fundamentals of logistics and supply chain management.	**PO1, PO2**
CO2	Recognise the importance of inventory and its planning.	**PO1,PO2, PO3, PSO1**
CO3	Need for warehousing, network of warehouses, and distribution centres.	**PO1, PO2, PO3, PO4, PO5, PO4,**
CO4	Importance of transportation and its role in logistics and supply chain management.	**PO1, PO5, PO7, PSO2**
CO5	Awareness of information technology and its application in supply chain management.	**PO11, PO12**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up	Development of entrepreneurial skills and spirit	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PSO 1	PSO 2	PSO 3
OLS11001	Supply chain management	3	2	2	1	1	3	-	1	1	3

1=weakly mapped

2= moderately mapped
3=strongly mapped

Model Question Paper

Name: **Enrolment No:**	

Course: OLS11001 Supply Chain Management

Program: BBA **Time: 3 Hrs.**

Semester: III **Max. Marks: 50**

Instructions:
Attempt any five questions from **Section A** (each carrying 2 marks); any **ThreeQuestions** from **Section B** (each carrying 10 marks)**. Section C** is Compulsory (carrying 10 marks)**.**

Section A (Attempt any Five)			
1.	What is the importance of supply chain management in a business organisation?	**2**	**CO1**
2.	What are the components of logistics management?	**2**	**CO2**
3.	What is the requirement of inventory management for a manufacturing enterprise?	**2**	**CO4**
4.	What is market positioned warehouse?	**2**	**CO3**
5	How ERP can be used for effective supply chain management?	**2**	**CO5**
6	What is ABC analysis in inventory classification?	**2**	**CO4**
	SECTION B		
7.	What is supply chain integration? Explain the process of integrating supply chain management for a firm for efficient operation.	**10**	**CO2**

8.	Explain the transportation selection criteria for a firm keeping in view all the necessary factors in mind.		**CO4**
9.	What is value chain? How a firm can optimise primary and supportive activities to earn profit? Explain with diagram.	**10**	**CO1**
	SECTION C is Compulsory		
10.	Case Study on Distribution and IT	**10**	**CO3 and CO5**

OLS11002	**PRODUCTION AND OPERATIONS MANAGEMENT**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 60**	3	1	0	4
Pre-requisites/Exposure	Basic Calculation Skills				
Co-requisites	--				
Academic Year	2020-21				

Course Objectives

1. To understand the basic concepts and theories of production management.
2. To gain a deeper insight of production management, planning and quality assurance.
3. To expand individual knowledge of production management principles and practices.
4. To apply operations management concepts and their influence on business decisions.

Course Outcomes:

On completion of this course, the students will be able to:

CO1. Discuss the fundamental concepts of Production and Operations Management.

CO2. Recognize the different techniques in Production Planning and Control.

CO3. Evaluate the importance of work-motion study and plant/facility layout.

CO4. Illustrate quality assurance in production and operations management.

Course Description:

Production and Operations Management deal with the processes that transform the inputs of an organization into final goods (or services) through a set of defined, controlled and repeatable policies. This course emphasizes the concepts and practices of managing production and operations in contemporary organizations. This course provides an introduction to the field of production and operations management. The course is designed to highlight the practical and applied techniques which can improve the organization's overall quality and productivity. All the lectures contain a blend of discussions on basic theories and advanced topics, focusing on practical implementation of knowledge. Classes will be conducted by lecture as well as power point presentation as per requirement. The tutorials will familiarize the students with practical problem-solving techniques. Students will be able to gain a strong understanding of the course via theoretical sessions, case study discussions, problem solving and discussions with the coordinator.

Course Structure:

Unit I: 15 L

Introduction of Production Management: Production Management, Productivity, Capital Productivity, Labour Productivity, Personnel Productivity, Training.

Introduction to Operations Management: Introduction, Operations Management and Strategy, Tools for Implementation of Operations, Industry Best Practices.

Unit II 15 L

Product Planning and Control: Production Planning and Control –Models, Process Planning, Aggregate Planning, Scheduling, Data Encryption, Cryptography, Public key, Private key, Computer network- concept, LAN, WAN, Intranet, Extranet, Strategic use of Internet, WWW in marketing.

Unit III 20 L

Work, Motion Study and Plant Layout: Work Study, Motion Study, Work Measurement, Work Sampling, Work Environment, Relationship between Time & Motion Study to work study.

Facility or Layout Planning and Analysis**:** Introduction, Objectives of Layout, Classification of Facilities, Basis for Types of Layouts, Why Layout decisions are important, Nature of layout problems, Redesigning of a layout, Evaluating Plant Layouts, Assembly Line Balancing, Material handling, Symptom of material handling, Objectives and principles of material handling, Types of material handling equipment.

Unit IV 10 L

Quality Assurance: Quality Assurance, Acceptance Sampling, Statistical Process Control, Total Quality Management, Maintenance Management, Towards TQM, ISO 9000 as a Platform, Working with Intranet, Total Productive Maintenance (TPM), Kaizen , JIT.

Text Books:

1. S.A.Kumar, N. Suresh, Production and Operations Management (With Skills Development, Caselets and Cases), New Age International Publishers.
2. P. Rama Murthy, Production and Operations Management, New Age International,
3. L.C. Jhamb, Production & Operation Management, Everest Publication
4. R.S. Russel, B.W. Taylor, Operations Management Creating Value Along The Supply Chain, John Wiley & Sons Inc.

Modes of Examination: Assignment/Quiz/Project/Presentation/Written Examination

Examination Scheme:

Components	Mid Term	Attendance	Class Assessment	End Term
Weightage (%)	20	00	30	50

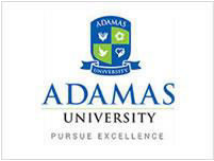
Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Discuss the fundamental concepts of Production and Operations Management.	**PO1, PO2, PO5, PO6, PSO1, PSO3**
CO2	Recognize the different techniques in Production Planning and Control.	**PO1, PO2, PO4, PO5, PSO1**
CO3	Evaluate the importance of work-motion study and plant/facility layout.	**PO1, PO2, PO3, PO5, PO6, PO7, PSO1, PSO2**
CO4	Illustrate quality assurance in production and operations management.	**PO1, PO2, PSO1**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up higher studies and research.	Development of entrepreneurial skills and spirit.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO3
OLS11002	Production and	3	3	1	1	2	2	1	2	1	1

	Operations Management										

1= weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	

Course: OLS11002 – Production and Operations Management

Program: BBA **Semester: III**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

SECTION A (Answer All Questions)

1.	What is the difference between Productivity and Efficiency?	Remembering	**CO1**
2	Compare and contrast between PERT and CPM.	Understanding	**CO2**
3	A worker while working during his shift either does the job assigned to him or remains idle for one or the other reason. The following table shows that out of total 50 observations, there were 45 working observations and five idle observations. **State of Worker** / **Number of Observations** Working / 45 Idle / 5 Based on the data provided, for a 9 hour shift, analyze the idle-time of the worker.	Analysing	**CO3**
4	What do you understand by JIT?	Remembering	**CO4**
5	What are the different types of cryptographic algorithms?	Remembering	**CO1**
	SECTION B		
1.	What do you mean by aggregate planning? What are the different strategies that you need to take when demand needs to be increased to match capacity? What are the different strategies that	Remembering	**CO2**

<table>
<tr><td></td><td>need to be used to increase or decrease capacity to match current demand?</td><td></td><td></td></tr>
<tr><td>2</td><td>XYZ company specializes in door opening solutions. One part of the company focuses on manufacturing pin tumbler and lever locks for multiple brands including Union, Yale and Multi-Lock. The production line used to produce padlocks is a perfect example of a network system; the steps are shown in the Table below.

<table>
<tr><th>Activity</th><th>Description</th><th>Immediate Predecessor</th><th>Duration (Hours)</th></tr>
<tr><td>A</td><td>Receiving raw materials</td><td>-</td><td>0.5</td></tr>
<tr><td>B</td><td>Bolt Cutting</td><td>A</td><td>1.0</td></tr>
<tr><td>C</td><td>Transfer Machines (for drilling and cutting operations)</td><td>B</td><td>1.5</td></tr>
<tr><td>D</td><td>Transfer Machines (barrels)</td><td>B</td><td>1.4</td></tr>
<tr><td>E</td><td>Insert Shackle</td><td>C,D</td><td>2</td></tr>
<tr><td>F</td><td>Packaging of padlock</td><td>E</td><td>1.2</td></tr>
</table>

Q1. Build the network diagram
Q2. Identify the critical path.
Q3. What is the maximum time needed for completion of the task?</td><td>Creating, Applying, Remembering</td><td>CO2</td></tr>
<tr><td>3.</td><td>A new healthcare facility is targeted to serve seven census tracts in Delhi. The table below shows the coordinates for the centre of each census tract along with the projected populations, measured in thousands. Customers will travel from the seven census tract centres to the new facility when they need healthcare. Two locations being considered for the new facility are (5.5, 4.5) and (7,2), which are the census tracts C and F. Details of seven census tracts, co-ordinate distances along with the population for each centre are given below. If we use the population as the loads and use rectilinear distance, identify the location is better in terms of total load-distance score?

<table>
<tr><th>Sr. No.</th><th>Census Tract</th><th>(x, y)</th><th>Population</th></tr>
<tr><td>1</td><td>A</td><td>(2.5, 4.5)</td><td>2</td></tr>
<tr><td>2</td><td>B</td><td>(2.5, 2.5)</td><td>5</td></tr>
<tr><td>3</td><td>C</td><td>(5.5, 4.5)</td><td>10</td></tr>
</table></td><td>Applying</td><td>CO3</td></tr>
</table>

	4	D	(5, 2)	7		
	5	E	(8, 5)	10		
	6	F	(7, 2)	20		
	7	G	(9, 2.5)	14		
4.	What is work measurement? What is work sampling? A work sampling investigation was conducted to estimate the time for which the workers in plant remain idle. A total of 720 observations were made about the workers. In 45 observations the workers were found idle. If the confidence level is 95% identify the absolute accuracy of the current estimate of the proportion of time consumed by idleness.				Remembering, Analysing	**CO3, CO4**
	SECTION C (Attempt any **Two Questions)**					
1.	The ABC Company makes a variety of candies in three factories worldwide. Its line of chocolate candies exhibits a highly seasonal demand pattern, with peaks during the winter months and valleys during the summer months. Given the following costs and quarterly sales forecasts, evaluate whether (a) level production, or (b) chase demand would be more economically meet the demand for chocolate candies:				Evaluating	**CO2**
	Quarter	**Sales Forecast (lbs)**				
	Spring	80,000				
	Summer	50,000				
	Fall	120,000				
	Winter	150,000				
	Hiring Cost = $100 per worker Firing Cost = $500 per worker Inventory carrying cost = $0.50 per pound per quarter Regular production cost per pound = $2.00 Production per employee = 1000 pounds per quarter Beginning workforce = 100 workers					
2.	The MS 800 car is to be assembled on a conveyor belt. Five hundred cars are required per day. Production time per day is 420 minutes, and the assembly steps and times for the wagon are given below. Identify the balance that minimizes the number of workstations, subject to cycle time and precedence constraints.				Applying	**CO3**
	Task	**Task Time (in seconds)**	**Description**	**Tasks that must precede**		
	A	45	Position rear	-		

			axle support and hand fasten			
	B	11	Four screws to nuts	A		
	C	9	Insert rear axle	B		
	D	50	Tighten rear axle support	-		
	E	15	Position front axle assembly	D		
	F	12	Fasten with four screws to nuts	C		
	G	12	Tighten front axle assembly screws	C		
	H	12	Position rear wheel 1 and fasten hubcap	E		
	I	12	Position rear wheel 2 and fasten hubcap	E		
	J	8	Position front wheel 1 and fasten hubcap	F, G, H, I		
	K	9	Position front wheel 2 and fasten hubcap	J		
3.	What do you mean by Total Quality Management and Total Productive Maintenance? What is the difference between partial and total productivity? Based on the information given below, find the productivity indices (labour productivity, capital productivity, material productivity, energy productivity, total productivity, total factor productivity). Output – Rs 10000/- Human Input – Rs 3000/- Material Input – Rs 2000/- Capital Input – Rs 3000/- Energy Input – Rs 1000/- Other Misc. Input – Rs 500/- The values are in terms of base year rupee value.					Remembering	**CO1, CO4**

BAN11004	**DATA PREPARATION FOR ANALYTICS**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	2	0	0	2
Pre-requisites/Exposure	Basic Calculation Skills				
Co-requisites	--				
Academic Year	2021-22				

Course Objectives

1. To understand the utility of data pre-processing for Data Analytics
2. To expand individual knowledge on different data manipulation techniques
3. To understand the various analysis techniques of processed data for decision making
3. To gain understanding of big data and associated analysis frameworks

Course Outcomes:

CO1: Understand concept and utility of data pre-processing

CO2: Gain knowledge on different data manipulation techniques

CO3: Gain expertise on various descriptive & inferential techniques of data analysis

CO4: Understand big data and it features

Course Description:

Global market demand reflects the growing pervasiveness of business reporting, predictive analytics and data visualization. This course will help participants learn Data Engineering which is at the core of Data Analytics journey. The course will provide exposure to participants on different data manipulation techniques, basic analytical techniques related to descriptive & inferential statistics and finally enable them to build basic predictive models from raw data. The course will also introduce the concept of big data and its associated analysis frameworks to the participants.

Course structure:

Unit 1: 4 Hours

Journey from raw data to processed data; various data pre-processing techniques; Merging Datasets- Joining & Appending; Concept of Primary Key and Foreign Key; Concept of Facts and

Dimensions; Master Tables and Transaction Tables; Tools used for Data Pre-processing, OSEMN Framework

Unit 2: 10 Hours

Concept of Data Cleaning and Data Manipulation; Removing Leading Spaces; Removing Duplicates; Missing Value Imputation; Sorting Datasets; Creating Primary Key in a dataset; Editing Time and Date Fields; Finding Outliers & Influential Points

Unit 3: 6 Hours

Basic Statistics- Measures of Central Tendency, Measures of Dispersion, Correlation, Scatter Plot; Concept of Quartiles & Outlier Detection; Introduction to Sampling, Estimation & Hypothesis Testing

Unit 4: 10 Hours

Linear Regression, Anova, Logistic Regression, Chi-Square Test

Suggested Readings:

1. Business Statistics in Practice- Using Data, Modeling & Analysis: Bowerman, O'Connell & Murphree
2. Business Analytics- The Science of Data Driven Decision Making: U Dinesh Kumar
3. Statistics for Management: Levin & David S. Rubin

Project:
The class will be divided into Groups consisting of 5 members each. Each group will be given a dataset which will analyze one real life scenario. The Group will have to analyze the data and create reporting frameworks and dashboards learnt during the sessions. Each group will present before all student as a result all students should have an idea of different real life scenarios and how to analyze the data.

Modes of Evaluation: Quiz/Assignment/presentation/Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Understand concept and utility of data pre-processing	**PO1, PO2, PO6, PO7, PO8, PSO1**
CO2	Gain knowledge on different data manipulation techniques	**PO1, PO2, PO6, PO8, PSO1, PSO2**
CO3	Gain expertise on various descriptive & inferential techniques of data analysis	**PO1, PO2, PO6, PO7, PO8, PSO1, PSO2**
CO4	Understand big data and it features	**PO1, PO2, PO3, PO6, PO7, PO8, PSO1, PSO2, PSO3**

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics and Governance	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Employability	Create capabilities of converting theoretical knowledge and data into practical applications with help of analytical tools and techniques.	Keep abreast of trans-disciplinary trends which can be brought to bear in creating strategic and tactical benefits in a VUCA world.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 03
BAN11004	Data preparation for analytics	3	3	1	-	-	3	2	2	3	2	2

1= weakly mapped

2= moderately mapped

3=strongly mapped

BAN11005	**INTERACTIVE QUERYING & BASIC REPORTING**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	1	0	2	2
Pre-requisites/Exposure	Basic Calculation Skills				
Co-requisites	--				
Academic Year	2021-22				

Course Objectives

1. To understand the concept and utility of Business Reporting
2. To expand individual knowledge on Data Warehousing and Data Mining Processes
3. To install Tableau Public and know about its features and usability
3. To build widgets and interactive dashboards using Tableau

Course Outcomes:

CO1: Understand concept and utility of Business Reporting

CO2: Gain knowledge on Data Warehousing and Data Mining Proceses

CO3: Install Tableau and build interactive dashboards using data from various sources

CO4: Build reporting frameworks which results in real life problem solving

Course Description:

Global market demand reflects the growing pervasiveness of business reporting and data visualization. In 2019, data visualization was valued at $9.06 billion and is projected to grow at a compound annual growth rate (CAGR) of 7.83% for a market size of $15.35 billion by 2026. This course will help participants learn Tableau, the preferred tool for data visualization by many organizations across the world. After the course, the participants will be able to build interactive dashboards using Tableau.

Course structure:

Unit 1: 4 Hours

Concept of Business Reporting; Utility of Business Intelligence; Facts & Dimensions; Basic Database Scripting; Joining of Tables; OLAPs and Cubes; Root Cause Analysis

Unit 2: 10 Hours

What is data warehousing?; Data warehouses and data marts; Overview of the components; Metadata in the data warehouse; Need for data warehousing; Basic elements of data warehousing; trends in data warehousing; The Architecture of BI and DW; BI and DW architectures and its types; Relation between BI and DW; Data Miming task primitives; Integration of a Data Mining system with a Database or a Data Warehouse; Issues in DM; KDD Process; Data Pre-processing;

Unit 3: 6 Hours

Installing Tableau, Connecting to various data sources- excel files and csv files; Bins; Joining Tables; Data Blending; Basic Data Manipulation- Data Labels, Sorting, Add Totals/ Sub-totals/ Grand Totals; Tableau widgets- Area Chart, Bar Chart, Line Chart, Pie-Chart, Treemap, Scatter-Plot, Combo Charts, Word Cloud, Geo-maps, etc

Unit 4: 10 Hours

Advanced Reporting Concepts- Dual Axis Reports, Calculated Fields, Creating Filters, Conditional Filters, Slicing & Dicing of Data, Create a Dashboard, Formatting Dashboard Layouts

Suggested Readings:

1. Learning Tableau: Joshua N. Milligan
2. Tableau Your Data! Fast and Easy Visual Analysis with Tableau Software: Daniel G. Murray
3. Practical Tableau: 100 Tips, Tutorials and Strategies from a Tableau Zen Master: Ryan Sleeper

Project:

The class will be divided into Groups consisting of 5 members each. Each group will be given a dataset which will analyze one real life scenario. The Group will have to analyze the data and create reporting frameworks and dashboards learnt during the sessions. Each group will present before all student as a result all students should have an idea of different real life scenarios and how to analyze the data.

Modes of Evaluation: Quiz/Assignment/presentation/Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Install and use Tableau for reporting and visualization purposes	**PO1, PO2, PO6, PO7, PO8, PSO1**
CO2	Build widgets and charts for visualizing analysis results	**PO1, PO2, PO6, PO8, PSO1, PSO2**
CO3	Build interactive dashboards using data from various sources	**PO1, PO2, PO6, PO7, PO8, PSO1, PSO2**
CO4	Build reporting frameworks which results in real life problem solving	**PO1, PO2, PO3, PO6, PO7, PO8, PSO1, PSO2, PSO3**

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics and Governance	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Employability	Create capabilities of converting theoretical knowledge and data into practical applications with help of analytical tools and techniques.	Keep abreast of trans-disciplinary trends which can be brought to bear in creating strategic and tactical benefits in a VUCA world.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 03
BAN11005	Interactive Querying and Basic Reporting	3	3	1	-	-	3	2	2	3	2	2

1= weakly mapped
2= moderately mapped
3=strongly mapped

Course Code MKT 11015	Marketing Management	L	T	P	C
Version 1.0	60 Hrs	3	1	0	4
Pre-requisites/Exposure	Basic knowledge of business and marketing is useful				
Co-requisites					

Course Objectives:

1. To understand the basic concepts of marketing management
2. To understand the marketing environment
3. To learn about marketing process for different types of products and services
4. To understand the tools used by marketing managers in decision making

Course Content

Unit-I 12 Hrs

Marketing – scope, nature, definition, core marketing concepts, Selling vs. marketing; Marketing mix recent trends in marketing in India.

Consumer Behavior and Market Segmentation: Nature, scope, and significance of consumer behavior; Market segmentation -concept and importance; Targeting and positioning.

Unit-II 13 Hrs

Product: Concept of product, consumer, and industrial goods; Product planning and development. Product life cycle, New product development.

Price: Importance of price in the marketing mix; Factors affecting price of a product/service; pricing methods.

Unit- III 12 Hrs

Distributions Channels and Physical Distribution: Distribution channels – concept and role; Types of distribution channels;. Channel management decision, Channel design decision; Retailing and wholesaling; Transportation; Warehousing.

Unit-IV 13 Hrs

Promotion: Integrated marketing communication, Advertising, Sales promotion, Public relation, Direct Marketing, salesmanship, personal selling process.

Text Book(s):-

1. Ramaswamy Namakumari, Marketing Management, Mc GrawHill, 5th edn.
2. Kotler Philip and Armstrong Gary: Principles of Marketing; Prentice-Hall of India, New Delhi.
3. Stanton W.J., Etzel Michael J., and Walker Bruce J; Fundamentals of Marketing; McGraw-Hill, New York

Course outcome

		Mapped programme Outcome
CO1	Discuss the different components of marketing and its impact on business performance.	PO1, PO2
CO2	Demonstrate product life cycle and new product development and pricing design in real market.	PO4,PO6, PSO1
CO3	Illustrate different design channel of distribution, pricing in different products and modern retailing	PO7, PO2, PSO1
CO4	Design of promotional techniques for the firms in terms of advertising and sales promotion.	PO2, PO6, PSO1

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	: Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up	Development of entrepreneurial skills and spirit	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO3
MKT11015	Marketing Management	3	3	-	-	-	3	3	3	-	-

Name: **Enrolment No:**	

Course: MKT11015– Marketing Management

Program: BBA **Semester: III**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

	SECTION A (Answer All Questions)		
1.	Define concept of societal marketing	Remembering	**CO1**
2	Compare and contrast between marketing vs. selling.	Understanding	**CO1**
3	Define the term marketing environment?	Remembering	**CO2**
4	What are different 4Ps of marketing	Remembering	**CO1**
5	What do you mean by reference pricing	Remembering	**CO1**
	SECTION B		
1.	Explain new product development concept? What are the different stages of new product development (NPD) Process?	Understanding	**CO2**
2	a) How to design up and down sides of price-oriented strategy?	Remembering	**CO3, CO2**
3.	Illustrate pricing method with suitable examples.	Understanding	**CO 3**
4.	Analyse how the low- end mobile handset makers in India realised the limitations of their price-oriented strategy and started brand development	Analysing	**CO3**
	SECTION C (Attempt any **Two Questions)**		
1.	After introducing popcorn and Sundrop cooking oil, ITC Agrotech lauched wheat flour (atta) under the brand name Healthy world. US based food products firm, Congra, has 51 percent stake in ITC Agrotech. The vice president says, "We tool an Indian perspective out of the Congra portfolio with relevance to local palate…Healthy World marks our entry into mass market products."	Applying	**CO4**

	Priced at Rs 18.50 for 1 kg pack, Healthy World comes in packs ranging from 500 gm to 1 kg. ITC Agrotech claims that it spent nearly one year on R& D before launching Healthy World, benchmarking it against national players in the branded atta category, players like HUL (Annapurna), Pillsbury. There are several regional brand too. Parameters such as softness, taste, colour and texture preferences are said to have been looked into in detail before finalizing the variant. "Our research revealed that the preferences in the North and South in India differ distinctly across almost all parameters of atta. While creamish to white colour and finer size is preferred in the South, the North consumer is more discerning as far as taste goes," informs the marketing manager. Consumers in the South are more receptive to branded atta, but the North leads in consumption, where average monthly household consumption is 27 kg as against just 3 kg in the South. Conagra claims to be the largest miller in the US. ITC Agro took over the atta manufacturing portion of a partner in Chennai to streamline it in line with its parent company's manufacturing process. What will also help ITC Agro is the fact that it has established itself as a health conscious manufacturer with Sundrop. The distribution network is already in place. In fact, the Healthy World packs too leverage this with the image of the boy somersaulting (The Sundrop trademark) with the proclamation- "from the makers of Sundrop." The branded atta market is estimated to be in excess of Rs 350 crore, with category advertising spend of about Rs 20-25 crore. The theme line of Healthy World says, "More health. More Energy." a) Develop a sales promotion plan to encourage continued consumption of Health World in North India. b) How would you make your sales promotion competition proof?		

	c) Examine the result of sales promotion in the above matter?		
2.	Discuss value philosophy of marketing and its application in Indian retail? Why do retailers develop their own private level brands?	Applying	**CO4**
3.	Design a product mix model a FMCG companies and describe its advantages and consequence in present market	Creating	**CO4**

PSG11021	**Human Values and Professional Ethics**	**L**	**T**	**P**	**C**
Version 1.0	**Contact hours-30**	**2**	**0**	**0**	**2**
Pre-requisites/Exposure	**--**				
Co-requisites	**--**				

Course Objectives

- To inculcate human values and professional ethics in students.
- To enhance the understanding of students towards personal, professional & societal relationships and achieve harmony in life.
- To develop moral responsibilities and ethical vision.

Course Outcomes

At the completion of the course, the student should be able to:

CO1. Understand the importance of values, ethics, harmony and lifelong learning in personal and professional life

CO2. Apply the knowledge to perform self-exploration and transformation augmenting harmony, peace and positivity in the surroundings

CO3. Appreciate the core values that shape the ethical behavior of a professional

Catalog Description

This course aims to develop an understanding for a movement from rule based society to a relationship based society. Apart from teaching values, this course encourages students to discover what values are for them and for society. Self-exploration also enables them to critically evaluate their pre-conditionings and present beliefs. It is designed in a way where students get familiar with the Ethical Code of Conduct, Ethical Dilemma, Conflict of Interest and all this will help them eventually in their professional life.

Course Content

Unit I: Introduction to Human Values: Character, Integrity, Credibility, Mutual Respect, Dedication, Perseverance, Humility and Perception. Self-Assessment & Analysis, Setting Life Goals, Consciousness and Self-Transformation. Team Work, Conflict Resolution, Influencing and Winning People, Anger Management, Forgiveness and Peace, Morality, Conscience. Yoga and Spirituality

Unit II: Harmony and Life Long Learning: Harmony in human being, Nature and Existence. Harmony in family and society –Responsibilities towards society, Respecting teachers. Transition from School to College - Freedom & Responsibilities, Respecting Cultural Diversity, Learning beyond the Classrooms, Independent study and research

Unit III: Introduction to Professional Ethics: Work Ethics, Engineering Ethics, Moral Dilemma, Moral Development Theories, Ethical Theories- Kantinism, Utilitarianism, etc , Case Studies for Choice of the theory, Code of Ethics

Unit IV: Individual to Global Issues: Industrial Standards, A Balanced Outlook on Law, Safety, Responsibility, Rights, Confidentiality, Conflict of Interest, Occupational Crime, Whistle Blowing, Environmental Ethics, Business Conduct in MNC, E-Professionalism (IPR, Internet Ethics & Privacy issues)

Text Books

1. Shetty, Foundation Course in Human Values and Professional Ethics [R.R. Gaur, R. Sangal, G.P. Bagaria]

Modes of Evaluation: Quiz/Assignment/ Seminar/Written Examination
Scheme:

Components	MSE I	MSE II (Activity)	Quiz/Assignment/Seminars etc	ESE
Weightage (%)				

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	Mapped Programme Outcomes
CO1	Understand the importance of values, ethics, harmony and lifelong learning in personal and professional life	PO8
CO2	Apply the knowledge to perform self-exploration and transformation augmenting harmony, peace and positivity in the surroundings	PO6
CO3	Appreciate the core values that shape the ethical behavior of a professional	PO8

		Engineering Knowledge	Problem analysis	Design/development of solutions	Conduct investigations of complex	Modern tool usage	The engineer and society	Environment and sustainability	Ethics	Individual or team work	Communication	Project management and finance	Life-long Learning
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12
PSG11021	Human Values and Professionals ethics						2		1 & 3				

1=weakly mapped
2= moderately mapped
3=strongly mapped

Course Outcomes Assessment

This course strongly contributes towards the program outcomes **'Ethics (PO8)'** and **'Life Long Learning (PO12)'** moderately contributes towards the program outcome**'The Engineer and Society (PO6)'** and weakly contributes towards **'Environment and Sustainibility (PO7)'**. The outcome will be measured by the performance of students in various class tests/assignments in addition to the End Semester Examination (ESE) that contains significant number of questions/activities, related to becoming a better human being and professional.

CLASS ACTIVITY/ASSIGNMENT SHEET

The following activities are provided as base guidelines. The teacher may go beyond these to attain the desired course outcomes.

CLASS ACTIVITY 1: SELF ANALYSIS

Introduce yourself. What are your goals in life? How do you set your goals in life? How do you differentiate between right and wrong? What have been your achievements and shortcoming in life? Analyse them.

CLASS ACTIVITY 2: SETTING GOALS

Short term goals and long term goals (discussing one's goals). How do we set our goal? How to handle responsibilities which have to be fulfilled while working for goals. CLASS ACTIVITY 3: HARMONY

Now-a-days, there is a lot of voice about many techno-genic maladies such as energy and natural resource depletion, environmental pollution, global warming, ozone depletion, deforestation, soil degradation, etc. – all these seem to be man-made problems threatening the survival of life on Earth – What is the root cause of these maladies & what is the way out in your opinion?

On the other hand, there is rapidly growing danger because of nuclear proliferation, arms race, terrorism, criminalization of politics, large scale corruption, scams, breakdown of relationships, generation gap, depression & suicidal attempts, etc. – what do you think, is the root cause of these threats to human happiness and peace – what could be the way out in your opinion?

CLASS ACTIVITY 4: BIOGRAPHY

Read biography of a successful person in your field. Share his/her journey from start to fame. What characteristic traits and qualities made that person achieve success? How can you cultivate these attributes in yourself?

CLASS ACTIVITY 5: CASE STUDIES ON ETHICS

Provide Case Studies related to ethical issues to team of students and ask questions. The team will need to discuss and then state the answers with justification. CALSS ACTIVITY 6: SELF EVALUATION

The course is going to be over now. Evaluate your state before and after the course in terms of

a. Thought
b. Behavior
c. Work

d. Realization

Do you have any plan to participate in the transition of the society after graduating from the institute? Write a brief note on it.

MODEL QUESTION

Course: VAL1723 - Human Values and Professional Ethics

Programme: UG All program **Semester: I Time: 03 hrs.**
Max. Marks:60
Instructions:
Attempt any **Four Questions** from **Section A** (each carrying 6 marks); any **Two Questions** from **Section B** (each carrying 10 marks)**. Section C** is Compulsory (carrying 16 marks)**.**

	SECTION A (Attempt any **Four Questions)**	
1.	What do you mean by happiness and Prosperity? Critically examine the prevailing notions of happiness in the society and their consequences.	**[06]**
2.	How do the current world views lead to contradictions and dilemmas in professional life? – Explain.	**[06]**
3.	What do you mean by 'Universal Human Order'?	**[06]**
4.	"Physical facilities are necessary and complete for animals, while they are necessary but not complete for humans." Comment.	**[06]**
5.	Why do you think that there should be emphasis on Life Long Learning in the current academic setting?	**[06]**
	SECTION B (Attempt any **Two Questions)**	
6.	Critically examine the issues in professional ethics in the current scenario. List any five unethical practices in profession today and the methods being tried to curb them.	**[10]**
7.	What are the implications of value based living at all four levels of living? Explain.	**[10]**
8.	Discuss the Basic Aspects and Characteristic Features of Kohlberg's Theory and Gilligan's Theory.	**[10]**
	SECTION C is Compulsory	
9.	**Case Study** **VI HI FI Hose Company** Anhydrous ammonia is used to fertilize the crops. The anhydrous ammonia reacts violently with water. Pressurized tanks provided with wheels carry this fertilizer, and tanks are pulled by tractors. Farmers take these tanks on rent. They take on rent or purchase the hose to carry this ammonia from the tank to perforated blades that dig into the soil and spread ammonia. Leaks from the hose are very dangerous. In the past, the hoses were made of steel-mesh reinforced rubber, which were similar to automobile tyres. Later, the reinforced-plastic hoses were introduced and they satisfied the standards. The VI HI FI has been marketing these hose to the farmers. The officials of the company arranged for testing the hose as a consultancy work in the Agricultural College. The tests indicated that the plastic did not react initially to the anhydrous	**[8+8]**

	ammonia. But over the years, the plastic was found to degrade and lose some mechanical properties. Hence, the company attached warnings on all the hoses, indicating that they should be replaced periodically. After a few years of use of the product in the market, several accidents occurred where the hoses ruptured during use and severely injured and blinded the farmers. Legal action followed and the company argued in defense that the farmers had misused the hoses and not heeded the replacement warnings. But they have to make substantial out-of-court settlements. The company then dropped the product line and advertised in the press asking the farmers to turn-in their hoses for full refunds. The advertisement stated that the hoses are 'obsolete', and not that are unsafe. (*a*) What are the factual, conceptual and normative issues? (*b*) What are the methods suggested for resolving these issues?	

FAC11008	**Cost and Management Accounting**	**L**	**T**	**P**	**C**
Version 1.1	**Contact Hours - 60**	3	1	0	4
Pre-requisites/Exposure	Understanding basic terms related to finance.				
Co-requisites	--				
Academic year	2020-21				

Course objectives:

1. Provide an understanding of the ways in which management accountants can provide relevant information for a variety of decisions to be made in managing any organisation.
2. Develop ability to identify, use and interpret the results of costing techniques appropriate to different activities and decisions and formulate and use standards and budgets for planning and control purposes.
3. Improving student's ability to understand the role of responsibility accounting and performance measurement; understand the behavioural implications of performance measurement and transfer pricing systems in divisionalised businesses.
4. Enhancing the appreciation for the need to relate management accounting systems to contemporary thinking about organisational planning and control.

Course Outcomes

On completion of this course, the students will be able to:

CO1: Explain the fundamental purposes of cost and management accounting. As part of this learning, students will be able to appreciate the *use of different costs for different purposes*.

CO2: Apply traditional and contemporary approaches to cost allocation.

CO3: Analyze relevant information for decision making purposes in order to produce financial analyses for a range of decisions such as product-mix, pricing, outsourcing and special orders.

CO4: Integrate the concept of standard costs with other theories to prepare budgets for planning and control purposes.

Course Description:

The subject 'Cost and Management Accounting' is very important and useful for optimum utilisation of existing resources. These are branches of accounting and had been developed due to limitations of financial accounting. It is an indispensable discipline for corporate management, as the information collected and presented to management based on cost and

management accounting techniques helps management to solve not only specific problems but also guides them in decision making. Classroom activities including lectures, discussions and case studies (topped up with role play) will be designed to encourage students to get involved, absorb and assimilate inputs. These activities will also be supplemented by group discussions, cooperative group solving problems, live projects, analysis of video cases and debates. Class participation is a fundamental aspect of this course. Students will be encouraged to actively take part in all group activities and to give an oral group presentation. Students will be expected to interact with media resources, such as, web sites, videos, and newspapers etc.

Course Structure

Unit I

10L

Introduction and Accountants Role in the organization, Cost Allocations, Activity Based Costing; Activity Based Costing Exercises and Problem Solving

Unit II **10L**

Cost Volume Profit Analysis (CVP), Marginal Costing, CVP & Marginal Costing Exercises and Problem Solving.

Unit III

10L

Standard Costing; Standard Costing, Exercises and Problem Solving, Planning: Master Budget, Budgets and Budgeting Cycles, Advantages, Steps in Developing Operating Budgets, Cash Budgets.

Unit IV **10L**

Flexible Budgets and Cost Variances, Flexible Budgets Exercises and Problem Solving; Cost Variances Exercises and Problem Solving

Unit V **10L**

Management Control Systems, Transfer Pricing; Transfer Pricing Exercises and Problem Solving

Text Book(s):-

1. Managerial Accounting: Ronald W Hilton,G Ramesh, M Jayadev, Tata McGraw-Hill
2. Cost Accounting: A Managerial Emphasis by Charles T. Horngren, Srikant M. Datar and George Foster, PHI Private Limited
3. Cost Accounting: A Managerial Emphasis by Horngren, Datar, Foster, Rajan and Ittner, Pearson

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination
Examination Scheme:

Components	Mid Term	Attendance	Class Assessment	End Term
Weightage (%)	20	00	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Explain the fundamental purposes of cost and management accounting. As part of this learning, students will be able to appreciate the use of different costs for different purposes.	**PO1, PO 2**
CO2	Apply traditional and contemporary approaches to cost allocation.	**PO1,PO5, PO3, PO 6, PSO2**
CO3	Analyze relevant information for decision making purposes in order to produce financial analyses for a range of decisions such as product-mix, pricing, outsourcing and special orders.	**PO2, PO4, PO 6, PSO1, PSO2**
CO4	Integrate the concept of standard costs with other theories to prepare budgets for planning and control purposes.	**PO5, PO6, PO7**

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	: Life-long Learning	Creativity and Innovation	Development of knowledge in the area of digital and allied technologies including digital tools such as SEO, SEM, social	Develop competencies to be socially responsible business professionals
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2
FAC11008	Cost and Management	3	3	2	1	1	3	2	1	3

	Accounting									

1= weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	

ADAMAS UNIVERSITY
SCHOOL OF BUSINESS & ECONOMICS
END SEMESTER EXAMINATION
Course: FAC11008 – Cost and Management Accounting

Program: BBA **Semester: IV**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

SECTION A (Answer All Questions)

1.	Define Maximum Stock Level.	Remembering	**CO1**
2	Define Economic Ordering Quantity.	Understanding	**CO1**
3	State the main point of difference between Halsey and Rowan System.	Remembering	**CO2**
4	State the difference between cost, price and value with an example.	Remembering	**CO1**
5	What is the primary difference between cost accounting and management accounting?	Remembering	**CO1**
	SECTION B		
1.	Two components A and B are used as follows – Normal Usage – 50 per week each Maximum usage – 75 per week each Minimum usage – 25 per week each Re-order Quantity – A = 300 units; B = 500 units Re-order period – A == 4 to 6 weeks B == 2 to 4 weeks Calculate for each component (a) Re-order Level; (b) Minimum Level; (c) Maximum Level; (d) Average Stock Level	Understanding	**CO2**
2	From the following particulars with respect to a particular item of materials of a manufacturing company, calculate the best quantity	Understanding	**CO1**

	to order: **Ordering quantities (Ton)** **Price per ton (₹)** Less than 250 6.00 250 but less than 800 5.90 800 but less than 2,000 5.80 2,000 but less than 4,000 5.70 4,000 and above 5.60 The annual demand for the material is 4,000 ton. Stock holding costs are 20% of material cost p.a. The delivery cost per order is ₹6.0		
3.	Pepsi Company produces a single article. Following cost data is given about its product: Selling price per unit Rs.40 Marginal cost per unit Rs.24 Fixed cost per annum Rs. 16000 Calculate: (a)P/V ratio (b) break even sales (c) sales to earn a profit of Rs. 2,000 (d) Profit at sales of Rs. 60,000?	Analyzing	**CO3**
4.	Johnny Ltd. manufactures a single product having a marginal cost of Rs. 1.50 per unit. Fixed cost is Rs. 30,000 per annum. The market is such that up to 40,000 units can be sold at a price of Rs. 3.00 per unit, but any additional sale must be made at Rs. 2.00 per unit. Company has a planned profit of Rs. 50,000. How many units must be made and sold	Analysing	**CO3**
	SECTION C (Attempt any **Two Questions**)		
1.	Prepare a statement showing the pricing of issues, on the basis of (a) Simple Average and (b) Weighted Average methods from the following information pertaining to Material-DS 2016 March 1 Purchased 100 units @ ₹10 each 2 Purchased 200 uits @ ₹ 10.2 each. 5 Issued 250 units to Job X vide M.R.No.12 7 Purchased 200 units @ ₹10.50 each 10 Purchased 300 units @ ₹10.80 each 13 Issued 200 units to Job Y vide M.R.No.15 18 Issued 200 units to Job Z vide M.R.No.17 20 Purchased 100 units @ ₹11 each 25 Issued 150 units to Job K vide M.R.No.25	Applying	**CO4**
2.	A company is providing its product to the consumer through the wholesalers. The managing director othe company thinks that if the company starts selling through retailers or to the consumers directly, it can increase its sales, charge higher prices and make more profit. On the basis of the following information, advise the	Applying	**CO4**

	managing director whether the company should change its channel of distribution or not: Particulars | Wholesaler | Retailer | Consumer ales per unit (Rs.) | 3.60 | 5.25 | 6.00 stimated Sales per year (units) | 1, 00, 000 | 1, 20, 000 | 1, 80, 000 Selling and distribution verheads (per unit in Rs.) | 0.40 | 1.00 | 1.50		
3.	From the following information's find out: a. P/V Ratio b. Sales & c. Margin of Safety Fixed Cost = Rs.40, 000 Profit = Rs. 20,000 B.E.P. = Rs. 80,000	Creating	**CO4**

IST11001	**Management Information System & ERP**	L	T	P	C
Version 1.0	**Contact Hours - 60**	3	1	0	4
Pre-requisites/Exposure	Basic Knowledge about Management Principles				
Co-requisites	-				

Course Objectives

1. To describe the role of information technology and decision support systems in business and record the current issues with those of the firm to solve business problems.
2. To introduce the fundamental principles of computer-based information systems analysis and design and develop an understanding of the principles and techniques used.
3. To enable students understand the various knowledge representation methods and different expert system structures as strategic weapons to counter the threats to business and make business more competitive.
4. To enable the students to use information to assess the impact of the Internet and Internet technology on electronic commerce and electronic business and understand the specific threats and vulnerabilities of computer systems.
5. To provide the theoretical models used in database management systems to answer business questions.

Course Outcomes

On completion of this course, the students will be able to

CO1. Relate the basic concepts and technologies used in the field of management information systems.
CO2. Compare the processes of developing and implementing information systems.
CO3. Outline the role of the ethical, social, and security issues of information systems.
CO4. Translate the role of information systems in organizations, the strategic management processes, with the implications for the management.
CO5. Apply the understanding of how various information systems like DBMS work together to accomplish the information objectives of an organization along with implementation of MIS.

Catalog Description

This course helps students see the connection between information systems (IS) and business performance. The use of information and communication technologies (ICT) by individuals and organizations dominates the business world. There is a fundamental change going on in the way that organizations run businesses and interact with each other. New types of infrastructure and applications are developed and utilized such as ERP (enterprise resource planning), IOS (inter-organizational systems), RFID (radio frequency identification), CRM (customer relationship management), to name a few. The aim of the course is to enable students to assess the opportunities and problems that managers in a wide range of organizations face as they attempt to use these IT applications to add value to their businesses. It also aims to help students understand transformational changes within and across industries. These changes have strategic implications for many businesses.

Course Content

Unit I: Introduction **10 Lecture Hours**

Basic concepts in organization and management. Information technology versus information systems. Concept of fit between an organization and its information systems.

Unit II: Decision Making **12 Lecture Hours**

Management Decision Types – Structured, Semi-structured, Unstructured. Role of information systems in decision making. Transaction Processing Systems, Management Information Systems, Decision Support systems.

Unit III: Information Systems **12 Lecture Hours**

Information Systems and Competitive Advantage. Porter's 5 Forces Model, impact of information systems on industry dynamics. Concept of value chain and eco-systems and impact of information systems on a firm and its eco-system's performance. ERP, SCM and KMS systems.

Unit IV: Data and Information Management **14 Lecture Hours**

Components of information technology infrastructure. Changing parameters of computing – mainframes to client servers to cloud computing. Importance of Data, Data Management Concepts. Keeping abreast of current trends in IT : Social, Mobile, Analytics, Cloud, AI, ML.

Unit V: IT Implementation **12 Lecture Hours**

Deploying information systems in organizations. Make or Buy. IT implementation Life Cycle. In-house versus Outsourcing.

Reference Books

1. Jawadekar, W.S., "Management Information Systems", Tata McGraw Hill Private Limited, New Delhi, 2009.
2. Kenneth C. Laudon and Jane P. Laudon: "Management Information Systems" 9/e, Pearson Education, New Delhi.
3. Alex Leon and Mathew Leon: "Data Base Management Systems", Vikas Publishing House, New Delhi.
4. Goyal, D.P.: "Management Information System", MACMILLAN India Limited, New Delhi, 2008.

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

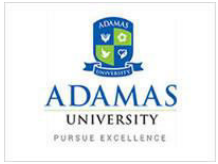
Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Relate the basic concepts and technologies used in the field of management information systems.	**PO1, PO6**
CO2	Compare the processes of developing and implementing information systems	**PO2, PO6, PO7**
CO3	Outline the role of the ethical, social, and security issues of information systems	**PO4, PO5, PO6**
CO4	Translate the role of information systems in organizations, the strategic management processes, with the implications for the management.	**PO1, PO4, PO6, PO7**
CO5	Apply the understanding of how various information systems like DBMS work together to accomplish the information objectives of an organization along with implementation of MIS.	**PO1, PO2, PO3, PO4, PO6, PO7**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up higher studies and research.	Development of entrepreneurial skills and spirit.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	PS03
IST11001	Management Information System & ERP	3	2	1	3	1	3	2	3	3	3

1=weakly mapped
2= moderately mapped
3=strongly mapped

Model Question Paper

Name: **Enrolment No:**	

Course: IST11001 –Management Information system & ERP

Program: BBA **Time: 03 Hrs.**

Semester: Even 2022-23 **Max. Marks: 50**

Instructions:

Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

	SECTION A (Answer All Questions)		
1.	Define MIS. **(Remembering)**	**2**	**CO1**
2.	Define Data and Information. **(Remembering)**	**2**	**CO1**
3.	Explain the meaning of Data Mining. **(Understanding)**	**2**	**CO2**
4.	Define Structured Decision. **(Remembering)**	**2**	**CO4**
5.	Define ERP. (**Remembering)**	**2**	**CO4**
	SECTION B		
1.	Explain Information Life Cycle (**Understanding)**	**5**	**CO4**
2.	Distinguish between Strategic Decision and Stand Alone Decision. **(Analyzing)**	**5**	**CO1**
3.	State the ethical issues involved in Planning of MIS implementation. **(Analyzing)**	**5**	**CO3**
4.	Explain Software Reliability. **(Analyzing)**	**5**	**CO5**
	SECTION C (Attempt any **Two Questions)**		
1.	Organization Structure influences MIS and in turn, MIS influences Organization Structure – Discuss in detail with suitable example. **(Creating)**	**10**	**CO5**
2.	Explain the need and demerits of Information System Audit. **(Understanding)**	**10**	**CO3**
3.	Define DBMS. (**Remembering**) Explain the need for using as a database management system while thinking of implementation of MIS in the organization. **(Understanding)**	**4 6**	**CO5**

MGT11005	**Introduction to Research Methodology**	**L**	**T**	**P**	**C**
Version 1.2	**Contact Hours – 60**	3	1	0	4
Pre-requisites/Exposure	Basic idea of Mathematics				
Co-requisites	--				
Academic year	2020-21				

Course Objectives

1. To provide understanding and learning fundamental concepts in the field of Business Research.
2. To get detail idea how to design research in relation to various business Problem.
3. To equip the students with research tools to conduct research and analysis for effective decision making.
4. To explore in the area of proposal writing and report preparation.

Course Outcome: At the end of the course, the student will be able to:

CO 1- Discuss basic concept of research methodology, identification of problem etc.

CO 2- Recognize and develop on understanding of qualitative and quantitative research.

CO3- Identify different Concept of Measurement and Levels of measurement and hypothesis testing.

CO 4- Demonstrate different statistical tools with different business problems

CO 5: Develop knowledge and skills on writing of research report

Course Description:

In present market scenario business decision can be taken on concrete practical evidences. Research methodology is an important subject for every business professional to take a fact based decision for the organization. It is fundamental subjects for the business that are making their business in analytics based decision making. This course will help the students to get knowledge on identification of research problem in relation to various business problems, design of problem, collection of information, development of questionnaire, analysis of the data by using different statistical tools.

Course Contents:

UNIT I: **14 Hrs**

Introduction: Concept of Research and Its Application in Various Functions of Management, Types of Research, Types of Business Problems Encountered by the Researcher, Problems and Precautions to the Researchers.

Process of Research: Steps Involved in Research Process. Research Design: Various Methods of Research Design, Collection of Data.

UNIT II: 10 **Hrs**

Concept of Sample, Sample Size and Sampling Procedure, Various Types of Sampling Techniques, Determination and Selection of Sample Member, Types of Data: Secondary and Primary, Various Methods of Collection and Data,

UNIT-III: **12 Hrs**

Preparation of Questionnaire and Schedule, Types of Questions, Sequencing of Questions, Check Questions, Length of Questionnaire, Precautions in Preparation of Questionnaire and Collection of Data. Measurement and scaling techniques.

UNIT- IV: 14 Hrs

Unit- Analysis of Data: Coding, Editing and Tabulation of Data, Various Kinds of Charts and Diagrams Used in Data Analysis: Bar and Pie Diagrams and their Significance, Use of SPSS / Excel in Data Analysis, Testing of hypothesis- mean, proportion, variances; Application and Analysis of Variance (ANOVA). Measurement and Central Tendency, Measure of Dispersion and their Advantages.

UNIT V **8 Hrs**

Report Preparation: Types and Layout of Research Report, Precautions in Preparing the Research Report. Bibliography and Annexure in the Report: Their Significance, Drawing Conclusions, Suggestions and Recommendations to the Concerned Persons.

Suggested Readings:

1. Kothari C R – Research Methodology Methods & Techniques (New Age International Publishers)

2 Saunders - Research Methods for Business students (Prentice hall, 2nd Edition, 2007)

2. Cooper and Schindler - Business Research Methods (Tata Mc Graw Hill, 9th Edition)

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination
Examination Scheme:

Components	Mid Term	Attendance	Class Assessment	End Term
Weightage (%)	20	00	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Discuss basic concept of research methodology, identification of problem etc.	**PO1, PO 2**
CO2	Recognize and develop on understanding of qualitative and quantitative research.	**PO1,PO2, PO3, PO 6, PSO2**
CO3	Identify different Concept of Measurement and Levels of measurement and hypothesis testing.	**PO2, PO4, PO 6, PSO1**
CO4	Demonstrate different statistical tools with different business problems.	**PO5, PO6, PO7**
CO5	Develop knowledge and skills on writing of research report.	**PO4, PO5, PSO 2**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	: Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up	Development of entrepreneurial skills	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO3

MGT11005	Introduction to research methodology	2	2	3	2	1	2	2	3	1	

1= weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	ADAMAS UNIVERSITY PURSUE EXCELLENCE

Course: MGT11005– Introduction to Research Methodology

Program: BBA **Semester: IV**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

	SECTION A (Answer All Questions)		
1.	Define concept of research methodology	Remembering	**CO1**
2	Compare and contrast between research method and methodology	Understanding	**CO1**
3	Define independent and dependent variables	Remembering	**CO2**
4	What are important aspects of questionnaire	Remembering	**CO1**
5	What do you mean hypothesis testing?	Remembering	**CO1**
	SECTION B		
1.	Explain the criteria of goodness of measurement scale.	Understanding	**CO2**
2	How does the case study method differ from survey method?	Remembering	**CO3, CO2**
3.	Illustrate and explain the procedure of selection of random sample.	Understanding	**CO 3**
4.	Analyse the merits and limitations of case study method in business research	Analysing	**CO3**
	SECTION C (Attempt any **Two Questions**)		
1.	1. Set up an analysis of variance table for the following per acre production data for three varieties of wheat, each grown on 4 plots and state if the verity	Applying	**CO4**

<table>
<tr><td></td><td>differences are significant. (Critical value- 4.26).
<table>
<tr><td colspan="4">Per acre production data</td></tr>
<tr><td>Plot of land</td><td colspan="3">Variety of wheat</td></tr>
<tr><td></td><td>A</td><td>B</td><td>C</td></tr>
<tr><td>1
2
3
4</td><td>6
7
3
8</td><td>5
5
3
7</td><td>5
4
3
4</td></tr>
</table></td><td></td><td></td></tr>
<tr><td>2.</td><td>Two researchers adopted different sampling techniques while investigating the same group of customers to find the number of customers falling in different buying-intelligence levels.
<table>
<tr><td>Researcher</td><td colspan="4">No of customers in each level</td><td></td></tr>
<tr><td></td><td>Below average</td><td>Average</td><td>Above average</td><td>Genius</td><td>Total</td></tr>
<tr><td>1</td><td>86</td><td>60</td><td>44</td><td>10</td><td>200</td></tr>
<tr><td>2</td><td>40</td><td>33</td><td>25</td><td>2</td><td>100</td></tr>
<tr><td>Total</td><td>126</td><td>93</td><td>69</td><td>12</td><td>300</td></tr>
</table>
Are the two sampling techniques and buying intelligence significantly independence. Test at 5% level of significance (value- 7.815)</td><td>Applying</td><td>CO4</td></tr>
<tr><td>3.</td><td>Develop a research questionnaire in relation to a market problem with the help of Likert and multiple scaling.</td><td>Creating</td><td>CO4</td></tr>
</table>

EIC11002	**Entrepreneurship Development**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 60**	3	1	0	4
Pre-requisites/Exposure	Basic understanding of business, innovation and marketing				
Co-requisites	--				

Course Objectives:

1. To expose students about entrepreneurship and its importance in every sector of economy since it opens up the door for enterprise creation in every sector of business.
2. Skilling up youth is to encourage them to set up their own micro/small enterprises or engage themselves productively in larger enterprises.
3. Creating an entrepreneurial eco-system essential in our country.
4. Developing an entrepreneurship movement through its education.

Course Outcomes:

On completion of this course, the students will be able to:

CO1. Understanding the basic fundamentals of entrepreneurship.
CO2. Recognise the importance of having strong entrepreneurial characteristics.
CO3. Process of business idea generation and converting the idea into a business model.
CO4. Role of government agencies that renders support in terms of policies, assistances etc.
CO5. Sustenance and growth of the enterprises by start-up entrepreneurs.

Catalogue Description

Entrepreneurship is generally understood to be the practice of starting new business organisations in response to perceived opportunities. It results in establishment of small one-person businesses as also large organisations capable of creating many job opportunities. Entrepreneurship has been identified as one of the major trends shaping business, economy and even society. The modern study of entrepreneurship owes a lot to the pioneering efforts of Joseph Schumpeter and other economists. Similarly, Frank Wright, Peter Drucker, and many others have successfully contributed to the growth of entrepreneurship theory, practice and research. In recent times, entrepreneurship and entrepreneurs have received a lot of attention from academicians, writers, media, and general public. The achievements and contributions of entrepreneurs have been acknowledged by society. Many entrepreneurs are honoured and awarded for their achievements nationally as well as internationally.

Course Content:

Module 1: 10 Lecture Hours

Introduction - Understanding the meaning of Entrepreneurial ship - Characteristics of an Entrepreneur - Classification of the Entrepreneurs – MSME Classification in India- Entrepreneurial Scene in India - Factors influencing Entrepreneurship.

Module II 10 Lecture Hours

Early Career Dilemmas of an Entrepreneur, The Entrepreneur's Role, Task and personality
A typology of Entrepreneurs: Defining Survival and success, Entrepreneurship as a Style of Management

Module III 10 Lecture Hours

Entrepreneurial growth - Role played by government and Non-Government agencies - EDP's, WBIDC, SIDBI, IDBI, IFCI. Rural Entrepreneurs - Small scale entrepreneurs and Export Entrepreneurs .

Module IV 10 Lecture Hours

Business plan, Business idea generation Techniques - Identification of Business Opportunities - Marketing Feasibility - Financial Feasibility - Technical - Legal - Managerial and Location Feasibility.

Module V 10 Lecture Hours

Project Appraisal - Methods - Techniques - Preparation of Business Plan - Content of a Business Plan - Project Report.

Module VI 10 Lecture Hours

Start of an enterprise - Franchising and Acquisition - Product Strategies - Pricing Strategies - Distribution Strategies - Promotional Strategies. How to be a successful Entrepreneur? Learning to be Successful - Successful entrepreneurs.

Reference Books:

1. Vasant Desai - Dynamics of Entrepreneurial Development and Management. HPH(2019)
2. Khanna - Entrepreneurial Development. S. CHAND (2018)
3. Rajeev Roy- Entrepreneurship, Oxford University Press

Modes of Examination: Assignment/Quiz/Project/Presentation/Written Exam

Examination Scheme:

Components	Internal	Attendance	Mid Term	End Term
Weightage (%)	30	00	20	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Understanding the basic fundamentals of entrepreneurship.	**PO1, PO2**
CO2	Recognise the importance of having strong entrepreneurial characteristics.	**PO1,PO2, PO3, PSO1**
CO3	Process of business idea generation and converting the idea into a business model.	**PO1, PO2, PO3, PO4, PO5, PO4,**
CO4	Role of government agencies that renders support in terms of policies, assistances etc.	**PO1, PO5, PO7, PSO2**
CO5	Sustenance and growth of the enterprises by start-up entrepreneurs.	**PO11, PO12**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	: Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up	Development of entrepreneurial skills	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO3
EIC11002	Entrepreneurship Development	3	3	-	-	-	-	3	3	-	3

1=weakly mapped
2= moderately mapped
3=strongly mapped

Model Question Paper

Name: **Enrolment No:**	

Course: EIC11002 Entrepreneurship Development

Program: BBA **Time: 3 Hrs.**

Semester: IV **Max. Marks: 50**

Instructions:

Attempt any five questions from **Section A** (each carrying 2 marks); any **Three Questions** from **Section B** (each carrying 10 marks)**. Section C** is Compulsory (carrying 10 marks)**.**

Section A (Attempt **any Three)**			
1.	What are the characteristics of an entrepreneur?	**2**	**CO1**
2.	Write principles of effectuation.	**2**	**CO2**
3.	What is the flow of an entrepreneurial idea?	**2**	**CO4**
4.	What is design thinking?	**2**	**CO3**
5	What is practice venture?	**2**	**CO5**
6	Define small and micro enterprise.	**2**	**CO4**
	SECTION B		
7.	Explain the factors influencing entrepreneurship.	**10**	**CO2**
8.	Write a business plan for a service idea.		**CO4**
9.	Explain the Government support available to start-up ventures.	**10**	**CO1**

	SECTION C is Compulsory		
10.	Case Study on Distribution and IT	**10**	**CO3 and CO5**

BAN11006	**APPLIED STATISTICAL MODELING**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	1	0	2	2
Pre-requisites/Exposure	Basic Calculation Skills				
Co-requisites	--				
Academic Year	2021-22				

Course Objectives

1. To understand the basic concepts and theories of multivariate descriptive analytics.
2. To gain a deeper insight of advanced techniques of data analysis
3. To expand individual knowledge of predictive modeling techniques.

Course Outcomes:

CO1: Provide guidelines to identify and describe real life problems so that relevant data can be collected

CO2: Linking data generation process with statistical distributions, especially in the multivariate domain

CO3: Providing step by step procedure for estimating parameters of a statistical model

CO4: Interpret model results in real life problem solving

Course Description:

The concept of data and statistical modeling is now part of the business lexicon. Organisations are integrating data science and analytics in their operations and have already seen big wins. Yet only a minority of business managers have perfected the practice of using data to manage information and performance. This course will provide an overview of various data analysis tools, especially in multivariate data analysis framework, which will enable participants to make data-driven decision making in a fast-changing business environment.

Course structure:

Unit 1: 4 Hours

Background Introduction to Multivariate Statistical Modelling

Unit 2: 10 Hours

Descriptive Statistics, Sampling Distribution, Estimation, Hypothesis Testing & Inferential Statistics

Unit 3: 6 Hours

Analysis of variance (ANOVA), Multivariate analysis of variance (MANOVA)

Unit 4: 10 Hours

Multivariate Predictive Modeling: Multiple Linear Regression (MLR), Principle Component Analysis (PCA), Factor Analysis, Cluster Analysis, Introduction to Structural Equation Modeling (SEM)

Suggested Readings:

1. Applied multivariate statistical analysis by R A Johnson and D W Wichern,Sixth Edition,PHI, 2012.
2. Multivariate data analysis by Joseph F. Hair Jr,Rolph E.Anderson, Ronald LTatham, and William C.Black, Fifth Edition,Pearson Education, 1998.

Project:
The class will be divided into Groups consisting of 5 members each. Each group will be given a topic which will analyze one real life scenario. The Group will have to collect data based on a survey/from social-media and then they will have to analyze the data based on the queries taught during the sessions. Each group will present before all student as a result all students should have an idea of different real life scenarios and how to analyze the data.

Modes of Evaluation: Quiz/Assignment/presentation/Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Provide guidelines to identify and describe real life problems so that relevant data can be collected	**PO1, PO2, PO6, PO7, PO8, PSO1**

CO2	Linking data generation process with statistical distributions, especially in the multivariate domain	**PO1, PO2, PO6, PO8, PSO1, PSO2**
CO3	Providing step by step procedure for estimating parameters of a statistical model	**PO1, PO2, PO6, PO7, PO8, PSO1, PSO2**
CO4	Interpret model results in real life problem solving	**PO1, PO2, PO3, PO6, PO7, PO8, PSO1, PSO2, PSO3**

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics and Governance	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Employability	Create capabilities of converting theoretical knowledge and data into practical applications with help of analytical tools and techniques.	Keep abreast of trans-disciplinary trends which can be brought to bear in creating strategic and tactical benefits in a VUCA world.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 03
BAN11006	Applied statistical modeling	3	3	1	-	-	3	2	2	3	2	2

1= weakly mapped

2= moderately mapped

3=strongly mapped

Name:

Enrolment No:

ADAMAS UNIVERSITY
SCHOOL OF BUSINESS & ECONOMICS
END SEMESTER EXAMINATION
Course: BAN11006 – Applied Statistical Modeling

Program: BBA (Business Analytics) **Semester: IV**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

SECTION A (Answer All Questions)

1.	What are the different components of a Time Series?	Remembering	**CO1**
2	What are the goodness-of-fit measures of Linear Regression?	Remembering	**CO2**
3	The mean of seven observations is 8. A new observation 16 is added. What is the mean of eight observations now?	Applying	**CO3**
4	Mention the functional form of Logistic Regression? What is odd's ratio?	Remembering	**CO4**
5	Two samples A and B have the same standard deviations, but the mean of A is greater than that of B. What can you comment on the coefficient of variation of A compared to B?	Understanding	**CO4**
	SECTION B		
1.	The table contains the marks obtained by 6 students in a course	Creating, Applying	**CO1, CO2**

Student	Subject Marks					
	Maths	Science	Physics	Geog	History	Eng
	(150)	(130)	(120)	(100)	(100)	(100)
Ayush	90	50	90	60	70	80
Aman	100	80	80	40	80	70
Sajal	90	60	70	70	90	70
Rohit	80	65	80	80	60	75
Tanvi	80	65	75	95	50	85
Tarun	70	75	50	85	75	90

Find the following:

(a) Average marks obtained by all of them in Physics

<table>
<tr><td></td><td>(b) Number of students who got 60% and above in all subjects
(c) In which subject is the overall percentage the best?
(d) The overall percentage of Tarun and Tanvi</td><td></td><td></td></tr>
<tr><td>2</td><td>Explain cluster analysis briefly. What are the different methods of clustering?
Explain the different linkage methods used in Hierarchical Clustering Algorithm</td><td>Creating, Applying</td><td>CO3, CO4</td></tr>
<tr><td>3.</td><td>Explain the concept of confusion matrix in the context of Classification Algorithms.</td><td>Understanding</td><td>CO4</td></tr>
<tr><td>4.</td><td>What are the different methods of sampling? When is stratified sampling considered to be better than random sampling?</td><td>Remembering, Understanding</td><td>CO2</td></tr>
<tr><td></td><td colspan="2">SECTION C (Attempt any Two Questions)</td><td></td></tr>
<tr><td>1.</td><td>A study is designed to test whether there is a difference in mean daily calcium intake in adults with normal bone density, adults with osteopenia (a low bone density which may lead to osteoporosis) and adults with osteoporosis. Adults 60 years of age with normal bone density, osteopenia and osteoporosis are selected at random from hospital records and invited to participate in the study. Each participant's daily calcium intake is measured based on reported food intake and supplements. The data are shown below.

<table><tr><th>Normal Bone Density</th><th>Osteopenia</th><th>Osteoporosis</th></tr><tr><td>1200</td><td>1000</td><td>890</td></tr><tr><td>1000</td><td>1100</td><td>650</td></tr><tr><td>980</td><td>700</td><td>1100</td></tr><tr><td>900</td><td>800</td><td>900</td></tr><tr><td>750</td><td>500</td><td>400</td></tr><tr><td>800</td><td>700</td><td>350</td></tr></table></td><td>Creating, Understanding</td><td>CO2</td></tr>
<tr><td>2.</td><td>(a) Explain the different parts of a Dendogram in Hierarchical Clustering algorithm.
(b) Explain the working of dendrogram in the agglomerative Hierarchical Clustering Algorithm.</td><td>Understanding</td><td>CO4</td></tr>
<tr><td>3.</td><td>What are the various steps involved in data analysis?
Mention few business applications of Predictive analytics algorithms that have been covered in the course</td><td>Understanding, Applying, Creating</td><td>CO1, CO3, CO4</td></tr>
</table>

BAN11007	**BASICS OF R-PROGRAMMING**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	1	0	2	2
Pre-requisites/Exposure	Basic Calculation Skills, Basic Programming Skills				
Co-requisites	--				
Academic Year	2021-22				

Course Objectives

1. To understand the basic concepts of R programming.
2. To gain a deeper understanding of using R for accessing data from different files and performing complex operations.
3. To develop an understanding of visualizing data using R for better analysis.
4. To apply the knowledge learnt in different business scenarios.

Course Outcomes:

On completion of this course, the students will be able to:

CO1. Discuss the fundamental concepts of R programming.
CO2. Recognize the use of different commands in R for processing data and analyzing it in business scenarios.
CO3. Apply the knowledge learnt in R for visualizing the results.
CO4. Assess the use of R commands for machine learning related cases in various business scenarios.

Course Description:

With the increasing demand for data analytics, the need for utilizing open source programming software like R and Python is slowing increasing for data analysis. This course will prepare the students to understand how to program in R and utilize this knowledge to analyze data in different business oriented scenarios. All the lectures contain a blend of discussions on basic theories and advanced topics, focusing on practical implementation of knowledge. Classes will be conducted by lecture as well as power point presentation as per requirement. The tutorials will familiarize the students with practical problem-solving techniques. Students will be able to gain a strong understanding of the course via theoretical sessions, case study discussions, problem solving and discussions with the coordinator.

Course structure:

Unit I **8 L**

Introduction; Getting and Installing R; The R User Interface; Some basic operations in R; Overview of R packages; R Variables and Data types; R Data Structures- Vectors, Matrices, Dataframe, List

Unit II **10 L**

Getting deeper into R programming; Functions; Importing and Exporting Data; Data Manipulation using R; Descriptive Statistics using R: Solving business scenarios using R

Unit III **6 L**

Data Visualization using R; Getting an overview of graphics in R; Overview of ggplot2; Lattice Graphics; Visualizations with Plotly.

Unit IV **6 L**

Introduction to Machine Learning using R- Association Analysis, Linear Regression

Text Book(s):-

1. Adler, J.: R in a nutshell. A desktop guide reference. O'Reilly. 2nd Edition.
2. Grollemund, G., Wickham, H. : R for Data Science. O'Reilly.

Project:

The class will be divided into Groups consisting of 5 members each. Each group will be given a topic which will analyze one real life scenario. The Group will have to collect data based on a survey/from social-media and then they will have to analyze the data based on the queries taught during the sessions. Each group will present before all student as a result all students should have an idea of different real life scenarios and how to analyze the data.

Modes of Evaluation: Quiz/Assignment/presentation/Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	Mapped Program Outcomes

CO1	Discuss the fundamental concepts of R programming.	**PO1, PO2, PO6, PO7, PO8, PSO1**
CO2	Recognize the use of different commands in R for processing data and analyzing it in business scenarios.	**PO1, PO2, PO6, PO8, PSO1, PSO2, PSO3**
CO3	Apply the knowledge learnt in R for visualizing the results.	**PO1, PO2, PO6, PO7, PO8, PSO1, PSO2, PSO3**
CO4	Assess the use of R commands for machine learning related cases in various business scenarios.	**PO1, PO2, PO3, PO6, PO7, PO8, PSO1, PSO2, PSO3**

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics and Governance	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Employability	Create capabilities of converting theoretical knowledge and data into practical applications with help of analytical tools and techniques.	Keep abreast of trans-disciplinary trends which can be brought to bear in creating strategic and tactical benefits in a VUCA world.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 03
BAN22202	Basics of R programming	3	3	1	-	-	3	2	2	3	2	2

1= weakly mapped

2= moderately mapped

3=strongly mapped

Name:

Enrolment No:

ADAMAS UNIVERSITY
SCHOOL OF BUSINESS & ECONOMICS
END SEMESTER EXAMINATION
Course: BAN11007 – Basics of R-Programming

Program: BBA (Business Analytics) **Semester: IV**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**. This is an open book open laptop examination. You must submit your codes and outputs.**

SECTION A (Answer All Questions)

1.	What is the difference between data frame and vector?	Remembering	**CO1**
2	What do you mean by control structures?	Remembering	**CO2**
3	Identify two reasons for the need of data visualization.	Applying	**CO3**
4	List two techniques for measuring R program performance.	Remembering	**CO4**
5	Compare and contrast between Linear and Logistic regression.	Understanding	**CO4**
	SECTION B		
1.	Create a 3 by 3 matrix consisting of the numbers 1-9. Assign this matrix to the variable mat. Find the maximum value in the matrix.	Creating, Remembering	**CO1, CO2**
2	Create a 5 by 5 matrix consisting of the numbers 1-25 and assign it to the variable mat2. Select a sub-section of mat2 from the previous exercise that looks like this: [7,8] [12,13]	Creating, Applying	**CO1, CO2**
3.	For the dataset given below, create a scatterplot of volume versus sales. Build a smooth fit line to the scatterplot.	Creating, Applying	**CO1, CO3, CO4**

Sales	**Volume**
72	53800
98	65050
130	92850
98	97300
141	10590
156	13910

	179 | 75892		
4.	Create a script that given a numeric vector x with a length 3, will print out the elements in order from high to low. You must use if, else if, and else statements for your logic.	Creating	**CO2**
	SECTION C (Attempt any **Two Questions)**		
1.	(a) We want to ship bars of aluminum. Create a function that accepts an integer representing the requested kilograms of aluminum for the package to be shipped. To fullfill these order, we have small bars (1 kilogram each) and big bars (5 kilograms each). Show the least number of bars needed. For example, a load of 6 kg requires a minimum of two bars (1 5kg bars and 1 1kg bars). A load of 17 kg requires a minimum of 5 bars (3 5kg bars and 2 1kg bars). (b)Use the 'mtcars' dataset from 'ggplot2' package and build a boxplot using factor as 'mpg'. In the box-plot, choose proper colours to visualize it better.	Creating, Understanding	**CO2**
2.	Use the table given below, save it in excel.	Applying	**CO4**

Child Bks	Yout hBks	Coo kBks	DoIt YBks	Ref Bks	ArtBks	GeogBks
0	1	0	1	0	0	1
1	0	0	0	0	0	0
0	0	0	0	0	0	0
1	1	1	0	1	0	1
0	0	1	0	0	0	1
1	0	0	0	0	1	0
0	1	0	0	0	0	0
0	1	0	0	1	0	0
1	0	0	1	0	0	0
1	1	1	0	0	0	1
0	0	0	0	0	0	0
0	0	1	0	0	0	1
1	0	0	0	0	1	0

Load it in R and then identify the association rules for the following criteria:

1. Support 70%; Confidence 60%
2. Support 50%; Confidence 40%
3. Lift > 1

3.	Based on the data given below, save this in an excel file. Load it in R. Which one will you choose as your target variable? What is the correlation between AdvExp and Sales. Build the regression model and interpret the results. Construct a graph to visualize the results.	Understanding, Applying, Creating	**CO1, CO3, CO4**

Time	AdvExp	Sales
1	25	92.8
2	0	79.2
3	15	84.5
4	10	83
5	20	88.1
6	10	83.9
7	5	79.9
8	5	81.1
9	15	86.4
10	15	86.3
11	5	79.9
12	20	86.6
13	15	85.4
14	5	80.5
15	10	83.5

BAN11002	**INTRODUCTION TO DATA ANALYTICS**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	0	0	4	2
Pre-requisites/Exposure	Basic Calculation Skills				
Co-requisites	--				
Academic Year	2021-22				

Course Objectives

1. To understand the basic concepts and theories of descriptive analytics.
2. To gain a deeper insight of predictive analytics and regression techniques.
3. To expand individual knowledge of supervised and unsupervised learning techniques.
4. To understand time series forecasting and its applications.

Course Outcomes:

On completion of this course, the students will be able to:

CO1: Discuss the fundamental concepts of descriptive analytics, probability and sampling.

CO2: Explain predictive analytics with the help of different regression techniques.

CO3: Evaluate the use of different Supervised and Unsupervised techniques.

CO4: Illustrate the importance of time series forecasting and relevant applications.

Course Description:

The concept of data and analytics is now part of the business lexicon. Organisations are integrating data science and analytics in their operations and have already seen big wins. Yet only a minority of business managers have perfected the practice of using data to manage information and performance. This course will provide an overview of various data analysis tools which are available to business managers to solve a wide variety of business problems.

Course structure:

UNIT –I Introduction to Data Analytics: 10 Hrs

Introduction to business analytics: Descriptive analytics: Data types and Scales, Population and sample, Measures of central tendency, Measures of variation, Measures of shape, Data visualization; Sampling Methods, Introduction to probability: Fundamental concepts in probability, Normal distribution, Central limit theorem, Estimation of population parameters; Confidence Intervals; Hypothesis Testing: One tailed and two tailed test, Type I error and type 2 error

UNIT- II Introduction to Predictive Analytics: 8 Hrs

Introduction to predictive analytics, Simple linear regression: Simple linear regression model building, Estimation of parameters, Interpretation of simple linear coefficients, Validation of simple linear regression model, Outlier analysis. Simple Linear regression and multiple linear regressions for prediction. Logistic Regression (Supervised learning): Introduction and Model building, Model Diagnostics, Classification table

UNIT- III Advanced Concepts in Machine Learning: 7 Hrs

Decision Tress (Supervised learning): Introduction and Model building, Clustering (Unsupervised learning): Introduction to unsupervised learning, Distance and dissimilarity measures in clustering, Clustering algorithm K Mean and Hierarchical.

Unit- IV: Time Series Forecasting: 5 Hrs

Forecasting Techniques: Time series modeling, Forecasting Techniques and Forecasting Accuracy, Moving average method

Reference Books:

TH 1. U. Dinesh Kumar: Business Analytics
TH 2. David S. Rubin & Levin: Statistics for Management

Project:

The class will be divided into Groups consisting of 5 members each. Each group will be given a topic which will analyze one real life scenario. The Group will have to collect data based on a survey/from social-media and then they will have to analyze the data based on the queries taught during the sessions. Each group will present before all student as a result all students should have an idea of different real life scenarios and how to analyze the data.

Modes of Evaluation: Quiz/Assignment/presentation/Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

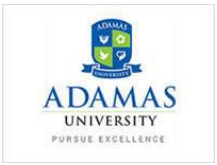
Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Discuss the fundamental concepts of descriptive analytics, probability and sampling.	**PO1, PO2, PO6, PO8, PSO1**
CO2	Explain predictive analytics with the help of different regression techniques.	**PO1, PO2, PO6, PO7, PO8, PSO1, PSO2, PSO3**
CO3	Evaluate the use of different Supervised and	**PO1, PO2, PO6, PO7, PO8, PSO1, PSO2,**

	Unsupervised techniques.	**PSO3**
CO4	Illustrate the importance of time series forecasting and relevant applications.	**PO1, PO2, PO3, PO6, PO7, PO8, PSO1, PSO2, PSO3**

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics and Governance	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Employability	Create capabilities of converting theoretical knowledge and data into practical applications with help of analytical tools and techniques.	Keep abreast of trans-disciplinary trends which can be brought to bear in creating strategic and tactical benefits in a VUCA world.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 03
BAN11002	Introduction to data analytics	3	3	1	-	-	3	2	2	3	2	2

1= weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	

ADAMAS UNIVERSITY
SCHOOL OF BUSINESS & ECONOMICS
END SEMESTER EXAMINATION
Course: BAN11002 – Introduction to Data Analytics

Program: BBA (Business Analytics) **Semester: IV**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

	SECTION A (Answer All Questions)		
1.	When do you mean by Normal Distribution? Discuss few properties of the distribution	Remembering	**CO1**
2	In MS Excel, what functions are used to (i) Find the parameters of Linear Regression (ii) Correlation Coefficient	Remembering	**CO2**
3	Explain OSEMN Framework	Applying	**CO3**
4	Mention the different types of Data Structures	Remembering	**CO4**
5	If the mean and standard deviation of the population are 1000 and 200 respectively, and a sampling distribution is constructed by taking several samples of size 100, what will be the standard deviation (standard error) of the sampling distribution?	Understanding	**CO4**
	SECTION B		
1.	What do you mean by Confusion Matrix? Mention some cases where Classification Algorithms are used in the industry	Creating, Remembering	**CO1, CO2**
2	When is Stratified Sampling preferred over Random Sampling?	Creating, Applying	**CO1, CO2**
3.	Suppose, Demand= a + b*Price where: Demand= Quantity Demanded of a particular item Price= Price per Unit of the item Given: Covariance between Demand and Price is -4000 Mean and Standard Deviation of Demand is 50 and 5 respectively Mean and Standard Deviation of Price is 15 and 10 respectively	Creating, Applying	**CO1, CO3, CO4**

<table>
<tr><td></td><td>Find out the values of ‘a’ and ‘b’</td><td></td><td></td></tr>
<tr><td>4.</td><td>Find the probability of getting 53 Sunday in a leap year.</td><td>Creating</td><td>CO2</td></tr>
<tr><td></td><td>SECTION C (Attempt any Two Questions)</td><td></td><td></td></tr>
<tr><td>1.</td><td>Mention the various components of Time Series. Explain with relevant examples.</td><td>Creating, Understanding</td><td>CO2</td></tr>
<tr><td>2.</td><td>Quarterly demand for a manufacturing part has been given below:
<table>
<tr><td>Year</td><td>Q1</td><td>Q2</td><td>Q3</td><td>Q4</td></tr>
<tr><td>2012</td><td>75</td><td>60</td><td>54</td><td>59</td></tr>
<tr><td>2013</td><td>86</td><td>65</td><td>63</td><td>80</td></tr>
<tr><td>2014</td><td>90</td><td>72</td><td>66</td><td>85</td></tr>
</table>
Calculate the Seasonality Index for the above dataset.
De-seasonalize the dataset with the Seasonality Index obtained above</td><td>Applying</td><td>CO4</td></tr>
<tr><td>3.</td><td>(i) At a restaurant, a total of 300 complaints were received. 240 customers complained about late delivery of the items and 100 complained about poor food quality. Calculate the probability that a customer complaint will be about both late delivery and food quality.

(ii) The blood groups of 200 people is distributed as follows: 50 have type A blood, 65 have B blood type, 70 have O blood type and 15 have type AB blood. If a person from this group is selected at random, what is the probability that this person has O blood type?</td><td>Understanding, Applying, Creating</td><td>CO1, CO3, CO4</td></tr>
</table>

BAN11013	**BASICS OF BUSINESS FORECASTING**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	2	0	0	2
Pre-requisites/Exposure	Basic Computation Skills				
Co-requisites	--				
Academic Year	2021-22				

Course Objectives

1. To understand the role of Business Forecasting in Business Analytics.
2. To gain a deeper insight of regression based techniques of forecasting.
3. To expand individual knowledge of supervised and unsupervised learning techniques.
4. To understand time series forecasting and its applications.

Course Outcomes:

On completion of this course, the students will be able to:

CO1. Understand the importance and purpose of Business Forecasting across Business Domains
CO2. Explain predictive analytics with the help of different regression and classification techniques.
CO3. Evaluate the use of different Supervised and Unsupervised techniques.

CO4. Illustrate the importance of time series forecasting and relevant applications.

Course Description:

The concept of data and analytics is now part of the business lexicon. This course will provide an overview of various predictive analytics tools which are available to business managers to forecast sales, revenue, profit and a host of related key performance indicators. The course intends to cover a variety of business forecasting methods for different types of data and associated business objectives.

Course Structure:

Unit I: Introduction to Business Forecasting 6 L

Introduction to Forecasting, Review of Statistical Concepts, Exploring Data Patterns, Choosing Forecasting Technique

Unit II: Regression-based Techniques of Forecasting 8 L

Simple and Multiple Linear Regression, Logistic Regression

Unit III: Supervised v/s Unsupervised Learning 8 L

Supervised Learning Algorithms: Decision Trees, Random Forests, Neural Networks; Unsupervised Learning Algorithm: Clustering- k-Means and Hierarchical Clustering

Unit IV: Time Series Forecasting 8 L

Time Series Components, Forecasting Techniques- Moving Average, Blended Moving Average, AR/MA/ARIMA, Holt-Winters, Decomposition

Text Book:-

TH 1. U. Dinesh Kumar: Business Analytics
TH 2. David S. Rubin & Levin: Statistics for Management

Project:

The class will be divided into Groups consisting of 5 members each. Each group will be given a dataset to analyze one business scenario. The Group will have to analyze the data based on the concepts/tools taught during the sessions. Each group will then present their findings.

Modes of Evaluation: Quiz/Assignment/presentation/Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Understand the importance and purpose of Business Forecasting across Business Domains	**PO1, PO2, PO6, PO7, PO8, PSO1**
CO2	Explain predictive analytics with the help of different regression and classification techniques	**PO1, PO2, PO6, PO8, PSO1, PSO2, PSO3**
CO3	To expand individual knowledge of supervised and unsupervised learning techniques	**PO1, PO2, PO6, PO7, PO8, PSO1, PSO2, PSO3**
CO4	To understand time series forecasting and its applications	**PO1, PO2, PO3, PO6, PO7, PO8, PSO1, PSO2, PSO3**

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics and Governance	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Employability	Create capabilities of converting theoretical knowledge and data into practical applications with help of analytical tools and techniques.	Keep abreast of trans-disciplinary trends which can be brought to bear in creating strategic and tactical benefits in a VUCA world.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 03
BAN11013	Basics of Business forecasting	3	3	1	-	-	3	2	2	3	2	2

1= weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	

ADAMAS UNIVERSITY
SCHOOL OF BUSINESS & ECONOMICS
END SEMESTER EXAMINATION
Course: BAN11013 – Basics of Business Forecasting

Program: BBA (Business Analytics) **Semester: V**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

	SECTION A (Answer All Questions)		
1.	What is the difference between Supervised & Unsupervised Learning?	Remembering	**CO3**
2	Explain the concept of training and validation datasets in context of business forecasting	Remembering	**CO1**
3	The mean of seven observations is 8. A new observation 16 is added. What is the mean of eight observations now?	Applying	**CO2**
4	Mention the functional form of Logistic Regression? What is odd's ratio?	Remembering	**CO2**
5	What are the different methods of forecasting time series data?	Understanding	**CO4**
	SECTION B		
1.	Suppose, Demand= a + b*Price where: Demand= Quantity Demanded of a particular item Price= Price per Unit of the item Given: Covariance between Demand and Price is -4000 Mean and Standard Deviation of Demand is 50 and 5 respectively Mean and Standard Deviation of Price is 15 and 10 respectively Find out the values of 'a' and 'b'	Creating, Applying	**CO2**
2	What do you mean by stationarity of a time series dataset? How do you convert a non-stationary series into a stationary series?	Understanding	**CO4**
3.	Explain the concept of confusion matrix in the context of Classification Algorithms.	Understanding	**CO2**
4.	When do you mean by Normal Distribution? Discuss few properties of the distribution	Remembering, Understanding	**CO1**
	SECTION C (Attempt any **Two Questions**)		

<table>
<tr><td>1.</td><td>Mention the various components of Time Series. Explain with relevant examples.</td><td>Remembering, Understanding</td><td>CO3, CO4</td></tr>
<tr><td>2.</td><td>Quarterly demand for a manufacturing part has been given below:
<table><tr><td>Year</td><td>Q1</td><td>Q2</td><td>Q3</td><td>Q4</td></tr><tr><td>2012</td><td>75</td><td>60</td><td>54</td><td>59</td></tr><tr><td>2013</td><td>86</td><td>65</td><td>63</td><td>80</td></tr><tr><td>2014</td><td>90</td><td>72</td><td>66</td><td>85</td></tr></table>
Calculate the Seasonality Index for the above dataset.
De-seasonalize the dataset with the Seasonality Index obtained above</td><td>Understanding, Applying</td><td>CO4</td></tr>
<tr><td>3.</td><td>What are the various steps involved in data analysis?
Mention few business applications of Predictive analytics algorithms that have been covered in the course</td><td>Understanding, Applying, Creating</td><td>CO1, CO3, CO4</td></tr>
</table>

BAN11011	**BIG DATA VISUALIZATION**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	1	0	2	2
Pre-requisites/Exposure	Computation Skills, Basic Programming Skills				
Co-requisites	--				
Academic Year	2021-22				

Course Objectives

1. To understand the basic concepts of Big Data and Data Engineering.
2. To gain a deeper understanding of Big Data Frameworks and Ecosystem.
3. To develop hands-on experience of working in Big Data processing tools.
4. To apply the knowledge learnt in different business scenarios.

Course Outcomes:

On completion of this course, the students will be able to:

CO1. Understand characteristics of Big Data
CO2. Understand Big Data Framework and Ecosystem
CO3. Understand Data Engineering with Hadoop and Spark
CO4. Identify and integrate more than one techniques to enhance the performance of learning

Course Description:

Big Data has a major impact on businesses worldwide, with applications in a wide range of industries such as healthcare, insurance, transport, logistics, and customer service. The course is designed to give students in-depth knowledge of the flexible and versatile frameworks on the Hadoop ecosystem and big data engineering tools like Data Model Creation, Database Interfaces, Advanced Architecture, Spark, SparkSQL, Spark Streaming, Spark ML, GraphX, Sqoop, Flume, Pig and Hive. This course will also teach students to model data, perform ingestion, replicate and share data using database management system.

Course Structure:

Unit I: Introduction to Big Data 6 L

Data Storage and Analysis - Characteristics of Big Data – Big Data Analytics - Typical Analytical Architecture – Requirement for new analytical architecture – Challenges in Big Data Analytics – Need of big data frameworks

Unit II: Hadoop Framework & Ecosystem 8 L

Requirement of Hadoop Framework, Design principle of Hadoop, Hadoop Components, HDFS Commands, Map Reduce Programming, Databases: HBase, Hive, Scripting language: Pig, Streaming: Flink, Storm

Unit III: Spark Framework 8 L

Introduction to GPU Computing, CUDA Programming Model, CUDA API, Simple Matrix, Multiplication in CUDA, CUDA Memory Model, Shared Memory Matrix Multiplication, Additional CUDA API Features, Writing Spark Application - Spark Programming in Scala, Python, R, Java

Unit IV: Spark SQL and GraphX 8 L

SQL Context – Importing and Saving data – Data frames – using SQL – GraphX overview – Creating Graph – Graph Algorithms. Overview – Errors and Recovery – Streaming Source – Streaming live data with spark

Text Book:-

1. Ethem Alpaydin,"IntroductiontoMachineLearning",MITPress,PrenticeHallofIndia, Third Edition2014.

2. Mehryar Mohri, Afshin Rostamizadeh, Ameet Talwalkar "Foundations of Machine Learning", MIT Press,2012.

3. Tom Mitchell, "Machine Learning", McGraw Hill, 3rdEdition,1997.

4. CharuC.Aggarwal,"DataClassificationAlgorithmsandApplications",CRCPress,2014.

5. Charu C. Aggarwal, "DATA CLUSTERING Algorithms and Applications", CRC Press, 2014.

6. Kevin P. Murphy "Machine Learning: A Probabilistic Perspective", The MIT Press, 2012

7. Jiawei Hanand Micheline Kambers andJianPei,"DataMining Concepts andTechniques",3rd edition, Morgan Kaufman Publications, 2012

Project:

The class will be divided into Groups consisting of 5 members each. Each group will be given a dataset to analyze one business scenario. The Group will have to analyze the data based on the queries taught during the sessions. Each group will then present their findings.

Modes of Evaluation: Quiz/Assignment/presentation/Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

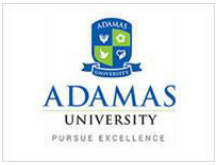
Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Understand characteristics of Big Data	**PO1, PO2, PO6, PO7, PO8, PSO1**
CO2	Understand Big Data Framework and Ecosystem	**PO1, PO2, PO6, PO8, PSO1, PSO2, PSO3**
CO3	Understand Data Engineering with Hadoop and Spark	**PO1, PO2, PO6, PO7, PO8, PSO1, PSO2, PSO3**
CO4	Identify and integrate more than one techniques to enhance the performance of learning	**PO1, PO2, PO3, PO6, PO7, PO8, PSO1, PSO2, PSO3**

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics and Governance	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Employability	Create capabilities of converting theoretical knowledge and data into practical applications with help of analytical tools and techniques.	Keep abreast of trans-disciplinary trends which can be brought to bear in creating strategic and tactical benefits in a VUCA world.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 03
BAN11011	Big data visualization	3	3	1	-	-	3	2	2	3	2	2

1= weakly mapped

2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	

ADAMAS UNIVERSITY
SCHOOL OF BUSINESS & ECONOMICS
END SEMESTER EXAMINATION
Course: BAN11011 – Big Data Visualization

Program: BBA (Business Analytics) **Semester: V**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

	SECTION A (Answer All Questions)		
1.	What are the features of Big Data?	Remembering	**CO1**
2	Why businesses are using Big Data for competitive advantage?	Remembering	**CO1**
3	Explain the importance of Hadoop technology in Big data analytics	Applying	**CO2**
4	Explain the core components of Hadoop	Remembering	**CO3**
5	Mention the different kinds of data models	Understanding	**CO1**
	SECTION B		
1.	What are the different ecosystems of Spark?	Remembering	**CO3**
2	What are the three modes that Hadoop can run?	Understanding, Applying	**CO2**
3.	How does the Spark Streaming API work?	Understanding	**CO3**
4.	Mention the common input formats in Hadoop.	Remembering, Understanding	**CO4**
	SECTION C (Attempt any **Two Questions)**		
1.	How to deploy a Big Data Model? Mention the key steps involved	Understanding, Remembering	**CO1, CO4**
2.	When can Apache Spark be used? What are the advantages of Spark over Mapreduce?	Understanding, Remembering	**CO3, CO4**

3.	Differentiate between Spark and Hadoop as a Data Engineering tool	Understanding, Remembering	**CO3, CO4**

BAN11014	**CLOUD COMPUTING**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	2	0	0	2
Pre-requisites/Exposure	Basic Computation Skills, Basic Programming Skills				
Co-requisites	--				
Academic Year	2021-22				

Course Objectives

1. To gain essential knowledge on characteristics and benefits of Cloud Computing
2. To understand the various Cloud Service Providers and Components of Cloud Infrastructure
3. To gain a deeper insight on concepts like Cloud Security, Encryption and Monitoring
4. To develop understanding on the emerging trends in Cloud Computing

Course Outcomes:

On completion of this course, the students will be able to:

CO1. Understand the unique features of Cloud Computing

CO2. Understand key concepts related to the components of Cloud Infrastructure, Cloud Security, Encryption and Monitoring

CO3. Focus on the emerging trends of Cloud Computing

CO4. Learn cloud adoption strategies by leading global organizations

Course Description:

This course aims to provide a basic understanding of various cloud computing technologies which are in use currently. The course will cover the various components of cloud computing ecosystem, service providers and the various service & deployment models which are in place. The course will also cover relevant used cases of organizations who have migrated to cloud computing and focus on the benefits that have accrued to them over the years.

Course Structure:

Unit I: Overview of Cloud Computing 6 L

Definition and essential characteristics of Cloud Computing, brief history and evolution of Cloud, Key cloud service providers and their services, Cloud Computing Service (IaaS, PaaS, SaaS) and Deployment Models (Public, Private, Hybrid)

Unit II: Components of Cloud Computing 8 L

Cloud Infrastructure Overview, Virtualization and VMs, Secure Cloud Networks, Containers, Cloud Storage- Direct Attached, File Storage, Block Storage, Object Storage, Content Delivery Networks

Unit III: Cloud Security 8 L

Cloud Security and Encryption, Monitoring

Unit IV: Emerging Cloud Trends 8 L

Hybrid Multicloud, Serverless, Microservices, Cloud Native, DevOps, Application modernization, Discussion on relevant case studies from industry

Text Book:-

1. Thomas Erl: Cloud Computing: Concepts, Technology and Architecture

Project:

The class will be divided into Groups consisting of 5 members each. Each group will be given a case study on cloud adoption by global organizations. The Group will have to analyze the case based on the cloud computing concepts taught during the sessions. Each group will then present their views and findings.

Modes of Evaluation: Quiz/Assignment/presentation/Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Understand the unique features of Cloud Computing	**PO1, PO2, PO6, PO7, PO8, PSO1**
CO2	Understand key concepts related to the components of Cloud Infrastructure, Cloud Security, Encryption and Monitoring	**PO1, PO2, PO6, PO8, PSO1, PSO2, PSO3**
CO3	Focus on the emerging trends of Cloud Computing	**PO1, PO2, PO6, PO7, PO8, PSO1, PSO2, PSO3**
CO4	Apply concepts learned in real-life business scenarios	**PO1, PO2, PO3, PO6, PO7, PO8, PSO1, PSO2,**

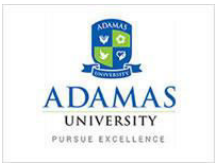
		PSO3

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics and Governance	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Employability	Create capabilities of converting theoretical knowledge and data into practical applications with help of analytical tools and techniques.	Keep abreast of trans-disciplinary trends which can be brought to bear in creating strategic and tactical benefits in a VUCA world.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 03
BAN11014	Cloud computing	3	3	1	-	-	3	2	2	3	2	2

1= weakly mapped

2= moderately mapped

3=strongly mapped

Name: **Enrolment No:**	

ADAMAS UNIVERSITY
SCHOOL OF BUSINESS & ECONOMICS
END SEMESTER EXAMINATION
Course: BAN11014 – Cloud Computing

Program: BBA (Business Analytics) **Semester: V**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

	SECTION A (Answer All Questions)		
1.	What are the advantages of using cloud computing?	Remembering	**CO1**
2	Mention platforms which are used for large scale cloud computing?	Remembering	**CO3**
3	Explain different models for deployment in cloud computing?	Applying	**CO2**
4	What are system integrators in Cloud Computing?	Remembering	**CO2**
5	What is the difference in cloud computing and computing for mobiles?	Understanding	**CO2**
	SECTION B		
1.	List out different layers which define cloud architecture?	Remembering	**CO2**
2	What are the security aspects provided with cloud?	Understanding, Applying	**CO2**
3.	What is the use of API's in cloud services?	Understanding	**CO3**
4.	Mention some open source cloud computing platform databases?	Remembering, Understanding	**CO4**
	SECTION C (Attempt any **Two Questions)**		
1.	Before going for cloud computing platform what are the essential things to be taken in concern by users?	Understanding, Remembering	**CO1, CO4**
2.	a) What are the characteristics of cloud architecture that separates it from traditional one? b) Mention what is the difference between elasticity and scalability in cloud computing?	Understanding, Remembering	**CO2, CO3**
3.	a) In cloud architecture what are the different components that are	Understanding, Remembering	**CO2, CO4**

	required? b) Mention what is Hypervisor in cloud computing and their types?		

BAN11009	**PYTHON PROGRAMMING**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	1	0	2	2
Pre-requisites/Exposure	Basic Calculation Skills, Basic Programming Skills				
Co-requisites	--				
Academic Year	2021-22				

Course Objectives

1. To understand the basic concepts of Python programming.
2. To gain a deeper understanding of using Python for accessing data from different files and performing complex operations.
3. To develop an understanding of visualizing data using Python for better analysis.
4. To apply the knowledge learnt in different business scenarios.

Course Outcomes:

On completion of this course, the students will be able to:

CO1. Explain the fundamental concepts of Python programming.
CO2. Recognize the use of different commands in Python for processing data and analyzing it in business scenarios.
CO3. Make use of different commands in Python for visualizing the results.
CO4. Assess the use of Python commands for machine learning related cases in various business scenarios.

Course Description:

With the increasing demand for data analytics, the need for utilizing open source programming software like Python is slowing increasing for data analysis. This course will prepare the students to understand how to program in Python and utilize this knowledge to analyze data in different business oriented scenarios. All the lectures contain a blend of discussions on basic theories and advanced topics, focusing on practical implementation of knowledge. Classes will be conducted by lecture as well as power point presentation as per requirement. The tutorials will familiarize the students with practical problem-solving techniques. Students will be able to gain a strong understanding of the course via theoretical sessions, case study discussions, problem solving and discussions with the coordinator.

Course Structure:

Unit I: 8 L

Introduction; Getting and Installing Python platform; Role of Python Programming for Data Science; Getting an overview of some basic operations in Python; Overview of some common Python packages; Variables in Python; Python basic data types; Numeric Operations using Python

Unit II: 8 L

File Handling in Python- Importing & Exporting Datasets; Finding Missing Values; Data Manipulation; Descriptive Statistics using Python; Analyze business cases using Python

Unit III: 6 L

Data Visualization using Python using Matplotlib and Seaborn; Business case discussion.

Unit IV: 8 L

Machine Learning using Python; Linear Regression; Time Series; Logistic Regression

Text Book:-

1. McKinney, W.: Python for Data Analysis- Data Wrangling with Pandas, Numpy and iPython. O'Reilly. 2nd Edition.

Project:

The class will be divided into Groups consisting of 5 members each. Each group will be given a topic which will analyze one real life scenario. The Group will have to collect data based on a survey/from social-media and then they will have to analyze the data based on the queries taught during the sessions. Each group will present before all student as a result all students should have an idea of different real life scenarios and how to analyze the data.

Modes of Evaluation: Quiz/Assignment/presentation/Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Explain the fundamental concepts of Python programming.	**PO1, PO2, PO6, PO7, PO8, PSO1**

CO2	Recognize the use of different commands in Python for processing data and analyzing it in business scenarios.	**PO1, PO2, PO6, PO8, PSO1, PSO2, PSO3**
CO3	Make use of different commands in Python for visualizing the results.	**PO1, PO2, PO6, PO7, PO8, PSO1, PSO2, PSO3**
CO4	Assess the use of Python commands for machine learning related cases in various business scenarios.	**PO1, PO2, PO3, PO6, PO7, PO8, PSO1, PSO2, PSO3**

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics and Governance	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Employability	Create capabilities of converting theoretical knowledge and data into practical applications with help of analytical tools and techniques.	Keep abreast of trans-disciplinary trends which can be brought to bear in creating strategic and tactical benefits in a VUCA world.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 03
BAN11009	Python programming	3	3	1	-	-	3	2	2	3	2	2

1= weakly mapped
2= moderately mapped
3=strongly mapped

Name:

Enrolment No:

ADAMAS UNIVERSITY
SCHOOL OF BUSINESS & ECONOMICS
END SEMESTER EXAMINATION
Course: BAN11009 – Python Programming

Program: BBA (Business Analytics) **Semester: V**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks). Any **Two Questions from Section C** (Each Carrying 10 Marks). **This is an open book open laptop examination. You must submit your codes and outputs.**

SECTION A (Answer All Questions)

1.	What are the main advantages of using Python as a statistical computing tool?	Remembering	**CO1**
2	Mention the popular packages used for doing Feature Engineering in Python	Remembering	**CO2**
3	Identify two reasons for the need of data visualization.	Applying	**CO3**
4	Which function is used to find out correlation in Python?	Remembering	**CO4**
5	Compare and contrast between Linear and Logistic regression.	Understanding	**CO4**
	SECTION B		
1.	What are the various data types in Python? Illustrate using relevant examples.	Creating, Remembering	**CO1, CO2**
2	What are the different operators in Python? Create suitable datasets in Python to illustrate functionality of such operators.	Creating, Applying	**CO1, CO2**
3.	For the dataset given below, create a scatterplot of volume versus sales. Build a smooth fit line to the scatterplot.	Creating, Applying	**CO1, CO3, CO4**

Sales	**Volume**
72	53800
98	65050
130	92850
98	97300
141	10590
156	13910
179	75892

<table>
<tr><td>4.</td><td>Mention few business applications of classification algorithms. What are the corresponding packages and functions used to deploy such algorithms in Python?</td><td>Applying</td><td>CO4</td></tr>
<tr><td></td><td>SECTION C (Attempt any Two Questions)</td><td></td><td></td></tr>
<tr><td>1.</td><td>Case Study: Please refer to the dataset- USA_Income. It contains the annual income and population of each of the districts in USA.

(a) Import the file
(b) Report the top and bottom few rows of the data. Make a note of the structure of the dataset. Please provide output screenshot.
(c) Are there any missing values in the dataset?
(d) Find Per Capita Income of each of the districts. Add an additional column in the dataset containing information on Per Capita Income and export it in a spreadsheet.

For all the above-mentioned questions, please provide the corresponding Python-code along with output screenshots and spreadsheets, wherever applicable.
PS: Per Capita Income= Income/Population

<table>
<tr><th>State</th><th>Income</th><th>Population</th></tr>
<tr><td>2104</td><td>39</td><td>2104</td></tr>
<tr><td>1290</td><td>27</td><td>1290</td></tr>
<tr><td>901</td><td>20</td><td>901</td></tr>
<tr><td>1161</td><td>20</td><td>1161</td></tr>
<tr><td>647</td><td>13</td><td>647</td></tr>
<tr><td>637</td><td>13</td><td>637</td></tr>
<tr><td>506</td><td>12</td><td>506</td></tr>
<tr><td>412</td><td>10</td><td>412</td></tr>
<tr><td>409</td><td>10</td><td>409</td></tr>
<tr><td>425</td><td>10</td><td>425</td></tr>
<tr><td>537</td><td>9</td><td>537</td></tr>
</table>
</td><td>Creating, Understanding</td><td>CO2</td></tr>
</table>

	372	7	372			

2. **Please refer to the dataset- TTA. It contains the inflow of international visitors over time.** — Applying — **CO4**

(a) Import the file and fit a Time Series Model based on Moving Average (Last 3 Years and Last 6 Years)
(b) What are the corresponding MAPE values of the model? Which of the above fitted models do you consider as a better fit

Year	Visitors_cr	Year	Visitors_cr
1975	0.83	1995	4.57
1976	0.86	1996	4.48
1977	0.88	1997	4.46
1978	0.87	1998	4.38
1979	0.93	1999	4.79
1980	1.05	2000	5.01
1981	1.31	2001	5.06
1982	1.64	2002	5.15
1983	2.06	2003	5.09
1984	1.91	2004	5.09
1985	2.03	2005	5.35
1986	2.18	2006	5.34
1987	2.39	2007	5.58
1988	2.75	2008	5.9
1989	3.09	2009	6.36
1990	3.42	2010	6.89
1991	3.83	2011	7.05
1992	3.97	2012	7.15
1993	3.83	2013	7.87
1994	4.14	2014	8.01

3. Based on the data given below, save this in an excel file. Load it in Python. Which one will you choose as your target variable? What is the correlation between AdvExp and Sales. Build the regression model and interpret the results. Construct a graph to visualize the results. — Understanding, Applying, Creating — **CO1, CO3, CO4**

Time	AdvExp	Sales
1	25	92.8
2	0	79.2
3	15	84.5
4	10	83
5	20	88.1
6	10	83.9
7	5	79.9
8	5	81.1
9	15	86.4

		10	15	86.3			
		11	5	79.9			
		12	20	86.6			
		13	15	85.4			
		14	5	80.5			
		15	10	83.5			

BAN11012	**VISUAL PREDICTIVE ANALYTICS**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	1	0	2	2
Pre-requisites/Exposure	Basic Analytical Skills, Presentation Skills				
Co-requisites	--				
Academic Year	2021-22				

Course Objectives

1. To understand the role of Visualization in Business Intelligence.
2. To understand the various chart types/widgets available to depict key performance indicators.
3. To develop hands-on experience of developing dashboards using Tableau and PowerBI.
4. To apply the knowledge learnt in different business scenarios.

Course Outcomes:

On completion of this course, the students will be able to:

CO1. Understand various chart types and widgets available to present information
CO2. Create Interactive and Easy-to-Use Dashboards
CO3. Develop Hands-On experience of working on Tableau and PowerBI
CO4. Apply concepts/tools learned in real-life business scenarios

Course Description:

The course aims to cover visualization tools like Tableau and PowerBI in the areas of charting, dates, table calculations and mapping. The students will be taught to explore the best choices for charts, based on the type of data one is using. Specific types of charts will be looked into, including scatter plots, Gantt charts, histograms, bullet charts and several others. Charting guidelines, connecting multiple data sources, creating custom parameters and quick table calculations will also be covered.

Course Structure:

Unit I: Introduction to Visualization 6 L

Role of Visualization in Business Intelligence, Story Telling Using Dashboards, Understand Key Performance Indicators across different business domains, Introduction to Various Chart Types and their applications

Unit II: Creating Visualizations with Tableau 8 L

Introduction to Tableau, installing Tableau, importing data, connecting multiple data sources, creating widgets as per data type

Unit III: Creating Visualizations with PowerBI 8 L

Introduction to PowerBI, installing PowerBI, importing data, connecting multiple data sources, creating tiles as per data type

Unit IV: Creating Interactive Dashboards Using Tableau and PowerBI 8 L

Create Interactive Dashboards based on requirement, Overall guidelines to build user-friendly dashboards, managing and exploring color scheme and overall theme of dashboards

Text Book:-

1. Joshua N. Milligan, Learning Tableau 2019: Tools for Business Intelligence, Data Prep and Visual Analytics, 3rd Edition
2. Ferrari Alberto, Russo Marco- Analyzing Data with Microsoft PowerBI and Power Pivot for Excel

Project:

The class will be divided into Groups consisting of 5 members each. Each group will be given a dataset to analyze one business scenario. The Group will have to analyze the data based on the concepts/tools taught during the sessions. Each group will then present their findings.

Modes of Evaluation: Quiz/Assignment/presentation/Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Understand various chart types and widgets available to present information	**PO1, PO2, PO6, PO7, PO8, PSO1**
CO2	Create Interactive and Easy-to-Use Dashboards	**PO1, PO2, PO6, PO8, PSO1, PSO2, PSO3**
CO3	Develop Hands-On experience of working on Tableau and PowerBI	**PO1, PO2, PO6, PO7, PO8, PSO1, PSO2, PSO3**
CO4	Apply concepts/tools learned in real-life business scenarios	**PO1, PO2, PO3, PO6, PO7, PO8, PSO1, PSO2, PSO3**

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics and Governance	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Employability	Create capabilities of converting theoretical knowledge and data into practical applications with help of analytical tools and techniques.	Keep abreast of trans-disciplinary trends which can be brought to bear in creating strategic and tactical benefits in a VUCA world.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 03
BAN11012	Visual predictive analytics	3	3	1	-	-	3	2	2	3	2	2

1= weakly mapped

2= moderately mapped

3=strongly mapped

Name: **Enrolment No:**	

ADAMAS UNIVERSITY
SCHOOL OF BUSINESS & ECONOMICS
END SEMESTER EXAMINATION
Course: BAN11012 – Visual Predictive Analytics

Program: BBA (Business Analytics) **Semester: V**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from (Each Carrying 25 Marks). **This is an open book open laptop examination. You must submit your codes and outputs.**

1.	Refer to the mtcars dataset (attached here). Import the file in Tableau. Please create: a) Pie-chart of cars by carb b) Barplot depicting count of cars by gears c) Distribution of cars by gears and cylinders d) Scatter plot of weight v/s mpg e) Create an interactive dashboard bringing in all the above widgets with car name as filter	**Applying**	**CO1, CO2, CO3, CO4**
2	Refer to the gdp dataset (attached here). Import the file in PowerBI. Please create: a) Scatter Plot between PCI (GDP per Cap) & Life Expectancy b) Barplot of Average Life Expectancy across Continents c) Histogram/Frequency Distribution/Density Plot of Life Expectancy d) Pie-Chart of Population Share by Continent e) Create an interactive dashboard bringing in all the above widgets/tiles with Year, Country and Continent as filters	**Applying**	**CO1, CO2, CO3, CO4**

mtcars.csv gdp.csv

MGT11003	**Business Ethics & Corprate Governance**	**L**	**T**	**P**	**C**
Version 1.0, Scheme: 2020-21	**Contact Hours - 60**	3	1	0	4
Pre-requisites/Exposure	Business Law 1, Business Ethics & Values				
Co-requisites	--				

Course Objectives:

1. To understand what is a corporation, types of ownership and the concept of corporate governance.
2. To gain exposure to the various laws and norms applicable in rendering effective corporate governance.
3. To enable students to identify sustainability and CSR issues and to design, conduct and evaluate sustainability assessment for policy making.

Course Outcomes

At the end of the course, the student will be able to:

CO1 **Describe** what is a corporation, types of ownership and the concept of Corporate governance

CO2 **Summarize** the concept of Board of directors, types of directors, differences among them, their remuneration, their rights etc. as per the Companies Act , 2013

CO3 **Explain** the concepts of financial oversight and audit mechanism, Role of SEBI, Risk management, Misgovernance, Whistle-blowers' protection etc.

CO4 **Interpret** the meaning, history, concept, evolution etc. of CSR, as well as CSR in India, relevant codes and initiatives

CO5 **Compare** CSR-Legislation In India & the world and **analyse** the scope for CSR Activities under Schedule VII

CO6 **Combine** the knowledge of CSR in India, and successful corporate initiatives & challenges of CSR to gain unique insights.

Course Description:

The course seeks to develop a sound understanding of the concepts of corporate governance and sustainable organisations. The objective is to expose the students to various issues, norms

and laws related to corporate governance. It attempts to establish a scientific base in sustainable development and policy-making as a strategic tool in organisations. It presents the main questions and answers related to sustainability, the theories describing them and the empirical work and the history, need and benefits of Corporate Social Responsibility.

Course Structure:

MODULE I **(9 Hours)**

Introduction to the concept of corporations, extended view of corporate citizenship. Owners and stakeholders: Types of owners, Rights and privileges of shareholders, Ownership structures and corporate governance, Perspectives on Corporate Governance: Theoretical background, Market and control model of governance chain

MODULE II **(9 Hours)**

Board of Directors: Types of Directors, Importance of Independent Directors, Board Committees and Chairman: Separation OF CEO & Board Chairman post, Nomination Committee, Board Selection, Boards Performance Evaluation, Executive Compensation: Role of Remuneration Committee, Human Side of Governance

MODULE III **(9 Hours)**

Financial Oversight and Audit Mechanisms: Audit Committee, Disclosure mechanisms, Role of SEBI, Governance and Risk Management, Risk Management Committee, Corporate Misconduct & Misgovernance: Reasons for Corporate Misconduct, Whistle Blower's Protection, Factors Responsible for Obstructing Effective Corporate Governance Practices

MODULE IV **(9 Hours)**

Introduction to CSR: Meaning & Definition of CSR, History & evolution of CSR. Concept of Charity, Corporate philanthropy, Corporate Citizenship, relation between CSR and Corporate governance; environmental aspect of CSR; Chronological evolution of CSR in India; major codes on CSR; Initiatives in India.

MODULE V **(9 Hours)**

CSR-Legislation In India & the world. Section 135 of Companies Act 2013.Scope for CSR Activities under Schedule VII, Appointment of Independent Directors on the Board, and Computation of Net Profit's Implementing Process in India.

MODULE VI **(9 Hours)**

The Drivers of CSR in India, Market based pressure and incentives civil society pressure, the regulatory environment in India Counter trends. Review current trends and opportunities in CSR.CSR as a Strategic Business tool for Sustainable development. Review of successful corporate initiatives & challenges of CSR. Case Studies of Major CSR Initiatives.

Text Books

T1. Fernando, A.C.: Corporate Governance- Principles, Policies and Practices, ed. Pearson Education.
T2. Corporate Governance in India - Jayati Sarkar, Subrata Sarkar, Sage Publications
T3. Corporate Social Responsibility in India - Sanjay K Agarwal
T4. Corporate Social Responsibility: Concepts and Cases: The Indian - C. V. Baxi, Ajit Prasad

Modes of Examination: Assignment/Quiz/Project/Presentation/Written Exam

Examination Scheme:

Components	Internal	Attendance	Mid Term	End Term
Weightage (%)	30	00	20	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Understand what is a corporation, types of ownership and the concept of Corporate governance	**PO1, PO3, PSO2**
CO2	Describe the Board of directors, types of directors, differences among them, their remuneration, their rights etc. as per the Companies Act , 2013	**PO1**
CO3	Concepts of financial oversight and audit mechanism, Role of SEBI, Risk management, Misgovernance, Whistle-blowers' protection etc.	**PO1, PO3, PO4, PSO1, PSO3**
CO4	Meaning, history, concept, evolution etc. of CSR. CSR in India, codes and initiatives	**PO1, PO4, PO5**
CO5	CSR-Legislation In India & the world. Scope for CSR Activities under Schedule VII	**PO3, PO5, PSO3**
CO6	Knowledge of CSR in India, successful corporate initiatives & challenges of CSR.	**PO2, PO5, PO6, PO7, PSO1, PSO3**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up higher studies and research.	Development of entrepreneurial skills and spirit.	Develop competencies to be socially responsible business professionals
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO3
MGT11003	Business Ethics & Corporate Governance	1	1	2	3	3	1	1	1	2	3

1=weakly mapped
2= moderately mapped
3=strongly mapped

Model Question Paper

Name: **Enrolment No:**	

Course: MGT11003 Business Ethics & Corporate Governance

Program: BBA **Time: 03 Hrs.**

Semester: V **Max. Marks: 50**

Instructions:
Attempt all questions from **Section A** (each carrying 2 marks); any **Four Questions** from **Section B** (each carrying 5 marks)**,** and any **Two Questions** from **Section C** (carrying 10 marks)**.**

	Section A (Attempt **ALL** questions)		
1.	**What** is the Indian equivalent of 'Tzedakah' in Judaism?	**2**	**CO4**
2.	**Name** two major differences between Equity shareholders and Preference shareholders	**2**	**CO1**
3.	**Which** country has a mandatory legal code on CSR?	**2**	**CO4**
4.	**Name** two Intergovernmental organisations which have a role driving SR activities.	**2**	**CO3**
5.	**What** is the minimum number of directors required for a public limited company?	**2**	**CO2**
	SECTION B (Attempt any **Four Questions)**		
6.	**Describe** the Stewardship Theory of Corporate Governance.	**5**	**CO2**
7.	**What** is Organizational misconduct? **What are** the main reasons for such misconduct?	**3** **2**	**CO3** **CO3**
8.	**Explain** the role and importance of the 'Nomination Committee'.	**3** **2**	**CO2** **CO2**
9.	**Explain** the role of 'Responsible Investing' as a driver of CSR. Please provide an example **for illustration**.	**4** **1**	**CO6** **CO6**
10.	**Describe** the evolution of Corporate Social Responsibility.	**5**	**CO4**
11.	**Explain** the major responsibilities of a Corporation.	**5**	**CO1**
	SECTION C (Attempt any **One Question)**		
12.	**Describe** the concept of 'Whistle Blower's Protection'. **What** is the Indian legal code for 'Whistle Blower's Protection' and **what** are its provisions?	**4** **2** **4**	**CO3** **CO3** **CO3**

13.	**What** are the qualifications for Independent Directorship under the Companies Act, 2013? Please **describe** in your own words the rationale for each of these provisions.	**5** **5**	**CO2** **CO2**
14.	**Case: Satyam scandal** Initial confession and charges On 7 January 2009, the chairman of Satyam, Byrraju Ramalinga Raju, resigned, confessing that he had manipulated the accounts of Rs 14,162 crore in several forms. The global corporate community was said to be shocked and scandalised. In February 2009, CBI took over the case and filed three partial charge sheets (dated 7 April 2009, 24 November 2009, and 7 January 2010), over the course of the year. All charges arising from the discovery phase were later merged into a single charge sheet. On 10 April 2015, Byrraju Ramalinga Raju was convicted with 10 other members. Role of Auditors PricewaterhouseCoopers affiliates served as independent auditors of Satyam Computer Services when the report of scandal in the account books of Satyam Computer Services broke. The Indian arm of PwC was fined $6 million by the SEC (US Securities and Exchange Commission) for not following the code of conduct and auditing standards in the performance of its duties related to the auditing of the accounts of Satyam Computer Services. In 2018, SEBI (Securities and Exchange Board of India) barred Price Waterhouse from auditing any listed company in India for 2 years, saying that the firm was complicit with the main perpetrators of the Satyam fraud and did not comply with auditing standards. SEBI also ordered disgorgement of over Rs 13 crore wrongful gains from the firm and two partners. PwC announced their intent to get a stay order. **Questions:** a) **Describe** the major issues in this case in terms of the principles of: i) Corporate Governance, and ii) Corporate Social Responsibility b) **What** are your suggestions to ensure that such failures are not repeated in future?	**4** **2** **4**	**CO1/CO3** **CO4** **CO1/CO3/CO4**

MGT11025	**International Business**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 60**	3	1	0	4
Pre-requisites/Exposure	Basic Knowledge of Economics and Marketing				
Co-requisites	--				

Course Objectives:

1. This course provides an overview of the importance of international business and trade in the global economy.
2. Students will learn various international trade theories.
3. It explores the factors that influence success in international markets.
4. Students will learn about the techniques and strategies associated with marketing, distribution, and managing international business effectively.
5. Will learn various tariff and non-tariff barriers in trade; trade agreements, objectives and its impact international business.

Course Outcomes

On completion of this course, the students will be able to

CO1. Recognise the concepts of international business and international trade theories
CO2. Understanding globalization and its effects on international business.
CO3. Getting familiar with the operational environment of international business in foreign market.
CO4. Understanding marketing challenges in international market and adapting to these challenges.
CO5. Familiarity with tariff and non-tariff barriers, role of WTO and regional trade agreements.

Course Description:

Globalisation and information technology along with adapted mindset and attitude of the people brought paradigm shifts in international business by removing the boundaries among the countries, cultures, industries as well as disciplines that transformed the international business as a distinct discipline. These shifts brought vibrant changes among the international as well as domestic business houses. Learn about the fundamentals of international business and the global economy. Students will acquire an appreciation of the different dimensions of the global economy, understand the drivers of global business, analyse the main economic and business organisations which facilitate global business. This course is designed to include

conventional lecture sessions with other modern teaching techniques such as case study, class assignments, continuous evaluation tests, and presentation on international business of a domestic company.

Course Content:

Unit 1: **15 Lecture Hours**

Business, Trade and the Economy: Terminology, Concepts and Business Communications Practices, The Importance of International Business, The Impact of International Business on India. Introduction to International Trade Theory: Mercantilism, Absolute Cost Advantage Theory, Comparative Cost Advantage Theory, Porter's Diamond of Advantage Theory and international Interdependence

Unit II: **10 Lecture Hours**

Global Environment for Business: Globalization and its effects on Business, Factors Influencing Participation in International Business, Foreign Market selection process. Foreign market Entry modes: Franchising, Exporting, Licensing, International Agents, International Distributors, Cross Border Mergers & Acquisitions, Strategic Alliances, Joint Ventures

Unit III: **10 Lecture Hours**

Factors Influencing Success in International Markets: Cultural Factors, Political, Economic, and Geographic Factors, Avoiding & Managing Common Mistakes & Problems, India's International Competitiveness.

Unit IV: **10 Lecture Hours**

Marketing Challenges, Approaches and Distribution: Marketing Challenges in international market, Marketing Approaches, Logistics & Global Distribution network.

Unit V: **15 Lecture Hours**

Understanding Integrations: Tariff and Non-Tariff barriers, General Agreement on Trade and Tariffs (GATT), General Agreement on Trade and Services (GATS). Understanding Functions of: Global Integrations- WTO. Regional Integrations: European Union (EU), North American Free Trade Agreement (NAFTA), South Asian Association for Regional Co-operation (SAARC).

Reference Books

1. Daniels,J.D.,Radebaugh L.H.,Sullivan D.P. & Prashant Salwan (2019), International Business: Environments and Operations, Pearson Hall, Delhi
2. P.Subba Rao, International Business, Himalaya Publishing House
3. Svend Hollensen and Madhumita Banerjee, Global Marketing, Pearson
4. Charles W L Hill. And Arun Kumar Jain (20018), International Business: competing in the global market place, 6ed.Mc Graw-Hill

Modes of Examination: Assignment/Quiz/Project/Presentation/Written Exam

Examination Scheme:

Components	Internal	Attendance	Mid Term	End Term
Weightage (%)	30	10	20	40

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Recognise the concepts of international business and international trade theories	**PO1, PO2, PO3**
CO2	Understanding globalization and its effects on international business.	**PO1,PO2, PO3, PSO1**
CO3	Getting familiar with the operational environment of international business in foreign market.	**PO1, PO2, PO3, PO4, PO5, PO4,**
CO4	Understanding marketing challenges in international market and adapting to these challenges.	**PO4, PO5, PO7, PSO8**
CO5	Familiarity with tariff and non-tariff barriers, role of WTO and regional trade agreements.	**PO11, PO12**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	: Life-long Learning	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up	Development of entrepreneurial skills and spirit	Develop competencies to be socially responsible business professionals.

Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO3
MGT11025	International Business	3	3	-	-	-	-	3	3	-	3

1=weakly mapped
2= moderately mapped
3=strongly mapped

Model Question Paper

Name: **Enrolment No:**	

Course: MGT11025 International Business

Program: BBA **Time: 3 Hrs.**
Semester: V **Max. Marks: 50**

Instructions:
Attempt any five questions from **Section A** (each carrying 2 marks); **Three Questions** from **Section B** (each carrying 10 marks)**. Section C** is Compulsory (carrying 10 marks)**.**

Section A (Attempt **any Three)**

1.	What is diamond of national advantage theory? Justify whether this theory is still valid in today's globalised context.	**2**	**CO1**
2.	What is international business? What are the competitive advantages of India for international business?	**2**	**CO2**
3.	Briefly write the factors influences in participation of international business to a country/company?	**2**	**CO4**
4.	Discuss the various modes available for entering into a	**2**	**CO3**

	foreign market to a firm?		
5	What refers to economic factors in terms of a foreign market? How does an economic factor can affect business of a firm in international market?	**2**	**CO5**
6	What is culture? Why culture influence preferences of customer?	**2**	**CO4**
	SECTION B		
7.	Who developed absolute advantage theory? Explain the concept of absolute advantage theory with the production example of two countries?	**10**	**CO1**
8.	Explain the factors affecting international business operations of a firm in global market.	**10**	**CO4**
9.	Explain the role of WTO in the context of globalisation of markets.	**10**	**CO5**
	SECTION C is Compulsory		
10.	Case Study	**10**	**CO3**

BAN11017	**FINANCIAL ANALYTICS**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	1	0	2	2
Pre-requisites/Exposure	Basic Programming Skills, Capital & Security Market Fundamentals				
Co-requisites	--				
Academic Year	2020-21				

Course Objectives

1. To understand the basic concepts of Financial Analytics
2. To get acquainted with the tools and techniques used to perform Financial Analytics
3. To gain an understanding of applications of Machine Learning (ML) Algorithms in Financial Analytics
4. To understand regulatory framework of financial markets and reporting requirements

Course Outcomes:

On completion of this course, the students will be able to:

CO1. Discuss the fundamental concepts and business applications of Financial Analytics.
CO2. Gain hands-on experience of developing financial models using statistical packages.
CO3. Understand applications of Machine Learning Concepts in Banking & Financial Domains.
CO4. Understand regulatory framework of financial markets and reporting requirements.

Course Description:

The Financial Analytics Course will deliver insights into the business financial data of companies. Financial analytics is an integral part of Business Intelligence and Enterprise Performance Management. It helps in building the strategy for the company or businesses through factual data insights.

Course Structure:

Unit I: Finance Fundamentals 6 L

Capital Market Operations, Financial Markets, Applications of R and Python in Algorithmic Trading, Foundations in Fin-Tech

Unit II: Introduction to Financial Analytics **8 L**

Exploratory Data Analysis in Finance, Financial Modeling & Ratio Analysis

Unit III: Advanced Financial Analytics **8 L**

Credit Risk Modeling, AI/ML in Financial Services, Using ML to forecast stock prices

Unit IV: Regulatory Framework in Financial Markets **8 L**

Overview of Regulatory Frameworks and Reporting

Text Book(s):-

1. Financial Analytics with R: Building a Laptop Laboratory for Data Science, Dirk L. Hugen & Mark Joseph Bennett
2. Quantitative Financial Analytics: The Path to Investment Profits, Edward E Williams & John A. Dobelman
3. Python for Finance, Yves Hilpisch

Project:

The class will be divided into Groups consisting of 5 members each. Each group will be given a topic/dataset which will analyze one real life scenario. They will have to analyze the case studies based on the concepts taught during the sessions. Each group will then present its findings/observations in class.

Modes of Evaluation: Quiz/Assignment/presentation/Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Discuss the fundamental concepts and business applications of Financial Analytics	**PO1, PO2, PO6, PSO1**
CO2	Gain hands-on experience of developing financial	**PO1, PO2, PO6, PO8, PSO1,**

	models using statistical packages	**PSO2, PSO3**
CO3	Understand applications of Machine Learning Concepts in Banking & Financial Domains	**PO1, PO6, PO8, PSO1, PSO2**
CO4	Understand regulatory framework of financial markets and reporting requirements	**PO1, PO2, PO7, PO8, PSO1, PSO2, PSO3**

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics and Governance	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Employability	Create capabilities of converting theoretical knowledge and data into practical applications with help of analytical tools and techniques.	Keep abreast of trans-disciplinary trends which can be brought to bear in creating strategic and tactical benefits in a VUCA world.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 03
BAN11017	Financial analytics	3	2	-	-	-	2	1	2	3	2	1

1= weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	

ADAMAS UNIVERSITY
SCHOOL OF BUSINESS & ECONOMICS
END SEMESTER EXAMINATION
Course: BAN11017 – Financial Analytics

Program: BBA (Business Analytics) **Semester: VI**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from (Each Carrying 25 Marks). **This is an open book open laptop examination. You must submit your codes and outputs.**

1.	Case Study: Please refer to the dataset- BFSI_IV. It contains the annual income of customers captured by a bank at the time of processing loan applications along with associated features related to financial transactions of customers. The objective is to build an income verification framework by a bank. BFSI_IV.csv (a) Import the file in R-Studio (b) Comment on the data structure (c) Fit a Linear Regression Model to predict the Annual Income (target variable) of customers which is dependent on its given set of features (d) Report the intercept term, coefficients and the goodness of fit measures	Applying	**CO1, CO2, CO3, CO4**
2	Case Study: Please refer to the dataset- CC_Default. It contains information on credit card payments default of customers along with related financial information. The objective is to predict the probability of default of customers by fitting a Logistic Regression. CC_Default.csv (a) Import the file in R-Studio (b) Comment on the data structure (c) Fit a Logistic Regression Model to predict the Probability of Default (target variable=Default) of customers which is dependent on its given set of features	Applying	**CO1, CO2, CO3, CO4**

	(d) Report the intercept term, coefficients and the goodness of fit measures		

BAN11015	**HADOOP**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	1	0	2	2
Pre-requisites/Exposure	Basic Calculation Skills, Basic Programming Skills				
Co-requisites	--				
Academic Year	2020-21				

Course Objectives

1. To understand the basic concepts of Hadoop and the need for learning Hadoop
2. To get acquainted with Hadoop architecture and ecosystem
3. To gain an understanding of relational and non-relational data stores using Hadoop
4. To gain an understanding of Big Data Analysis using Hadoop with different business cases

Course Outcomes:

On completion of this course, the students will be able to:

CO1. Discuss the fundamental concepts of Hadoop.
CO2. Develop an understanding of HDFS Operations & MapReduce Programming.
CO3. Illustrate the importance of relational and non-relational data stores using Hadoop.
CO4. Utilize the knowledge of Hadoop in Big Data Analysis using different business scenarios.

Course Description:

Apache Hadoop is a collection of open-source software utilities that facilitates using a network of many computers to solve problems involving massive amounts of data and computation. This course will prepare the students to understand the different Hadoop concepts and utilize this knowledge to analyze data in different business oriented scenarios. All the lectures contain a blend of discussions on basic theories and advanced topics, focusing on practical implementation of knowledge. Classes will be conducted by lecture as well as power point presentation as per requirement. Students will be able to gain a strong understanding of the course via theoretical sessions, case study discussions, problem solving and discussions with the coordinator.

Course structure:

Unit I: Fundamentals of Hadoop 8 L

Introducing Hadoop and understanding the need for Hadoop; Hadoop Overview and History; Overview of the Hadoop Ecosystem; Common use cases for Big Data in Hadoop; Reasons to adopt Hadoop; Storing Data in Hadoop; Reading and Writing data in Hadoop.

Unit II: Hadoop Architecture 10 L

Getting deeper into Hadoop; HDFS Operations**;** MapReduce Programming; Framework for processing data in Hadoop; Introducing Pig; Statistical Analysis using Hadoop; Solving some cases using Pig programming.

Unit III: Hadoop Databases 6 L

Hadoop and Structured Data; Hadoop and Data Warehouse; Introduction and few concepts of HBase; Applying structure to Hadoop data with Hive.

Unit IV: Big Data Analysis using Hadoop 6 L

Real-world business cases; Designing real world systems; Solving business cases using Hadoop.

Text Book(s):-

1. deRoos, D., Zikopoulos, P.C., Melnyk, R.B., Brown, B., Coss, R.: Hadoop for Dummies. Wiley.

Project:

The class will be divided into Groups consisting of 5 members each. Each group will be given a topic which will analyze one real life scenario. They will have to analyze the case studies based on the concepts taught during the sessions. Each group will then present its findings/observations in class.

Modes of Evaluation: Quiz/Assignment/presentation/Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Discuss the fundamental concepts of Hadoop.	**PO1, PO2, PO6, PSO1**
CO2	Develop an understanding of Pig and Hive in different business cases.	**PO1, PO2, PO6, PO8, PSO1, PSO2, PSO3**
CO3	Illustrate the importance of relational and non-relational data stores using Hadoop.	**PO1, PO6, PO8, PSO1, PSO2**
CO4	Utilize the knowledge of Hadoop in different business scenarios.	**PO1, PO2, PO7, PO8, PSO1, PSO2, PSO3**

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics and Governance	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Employability	Create capabilities of converting theoretical knowledge and data into practical applications with help of analytical tools and techniques.	Keep abreast of trans-disciplinary trends which can be brought to bear in creating strategic and tactical benefits in a VUCA world.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 03
BAN11015	Hadoop	3	2	-	-	-	2	1	2	3	2	1

2. 1= weakly mapped
3. 2= moderately mapped
4. 3=strongly mapped

Name: **Enrolment No:**	ADAMAS UNIVERSITY PURSUE EXCELLENCE

ADAMAS UNIVERSITY
SCHOOL OF BUSINESS & ECONOMICS
END SEMESTER EXAMINATION

Course: **BAN11015 - Hadoop**

Program: BBA (Business Analytics) **Semester: VI**

Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from **Section A** (Each Carrying 1 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**

	SECTION A (Answer All Questions)		
1.	Determine the use of Hadoop concepts in Fraud Detection.	Evaluating	**CO4**
2	What do you understand by structured data?	Remembering	**CO3**
3	Compare and contrast Hadoop with relational databases.	Evaluating, Understanding	**CO3**
4	Distinguish classification from clustering.	Analyzing	**CO3**
5	List two reasons to adopt Hadoop.	Remembering	**CO1**
	SECTION B (Attempt any **Three Questions)**		
1.	What is big data? Examine the need for Hadoop in the era of big-data.	Understanding, Analyzing	**CO1**
2	What are the different Pig data-types? Explain with relevant syntax.	Remembering, Understanding	**CO2**
3.	Explain the different Hive data-types.	Understanding	**CO3**
4.	Identify two emerging healthcare scenarios where Hadoop can make an impact. Explain in details	Applying, Understanding	**CO4**
	SECTION C (Attempt any **Two Questions)**		
1.	Examine machine learning with Mahoot with respect to the following scenarios: (a) Collaborative Filtering (b) Clustering (c) Classification	Analyzing	**CO2**
2.	Discuss the HBase Data Model and the HBase Architecture.	Creating	**CO3**
3.	Utilize the knowledge you gained in this course to explain how Hadoop is useful in modern era by providing examples of five business scenarios.	Applying, Understanding	**CO4**

BAN11018	**HR ANALYTICS**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	1	0	2	2
Pre-requisites/Exposure	Basic Programming Skills, HR/OB Fundamentals				
Co-requisites	--				
Academic Year	2020-21				

Course Objectives

1. To understand the basic concepts and applications of HR Analytics
2. To get acquainted with the tools and techniques used to perform HR Analytics
3. To gain an understanding of applications of Machine Learning (ML) Algorithms in HR Analytics
4. To understand the role played by data-driven strategies in framing HR Policies of an organization

Course Outcomes:

On completion of this course, the students will be able to:

CO1. Discuss the fundamental concepts and business applications of HR Analytics.
CO2. Gain hands-on experience of developing metrics and dashboards for HR Teams of Organizations
CO3. Understand applications of Machine Learning Concepts in HR Domain.
CO4. Frame HR policies based on data-driven decisions.

Course Description:

With advances in technology and cloud computing, there are now numerous data sources available to guide decision-making and drive organizational success. Harvesting the right kind of data requires that HR teams possess strong analytical skills; high-performing HR teams know that their function is to leverage data as a “decision science” by identifying metrics and data sources that deliver organizational insights. In order to do so, HR must ensure that metrics and measures are used effectively to achieve strategic goals. This course focuses on identifying effective data sources, developing meaningful metrics, designing long-term measures, and applying results in support of organizational strategy and tactics

Course Structure:

Unit I: Introduction to HR Analytics 6 L

HR Fundamentals, Strategic Role of HR, Basics of People Analytics, Framework for Problem Solving, Basics of Statistics

Unit II: HR Practices and Benchmarking 8 L

Important HR Metrics, HR Valuations, Benchmarking, Developing Dashboards in MS Excel, Performance and Goal Setting

Unit III: Workforce Planning and Talent Sourcing/Acquisition Analytics 8 L

Workforce Planning and its Use, Markov Chain, Scatter Plot, Trend Analysis, Concepts and Metrics- Job Analysis, Job Evaluation, Job Redesign, Predictive Modeling, Measuring Acquisition Effectiveness, Employee Training and Development Analytics

Unit IV: Talent Engagement Analytics 8 L

Major Drivers of Talent Engagement, Employee Engagement Surveys, Rewards- Key Considerations, Tracking Performance v/s Potential, Talent Retention Analytics

Text Book(s):-

1. Human Resource Analytics- Strategic Decision Making: Nisant Uppal
2. HR Analytics- Understanding Theories and Applications: Dipak Kumar Bhattacharyya

Project:

The class will be divided into Groups consisting of 5 members each. Each group will be given a topic/dataset which will analyze one real life scenario. They will have to analyze the case studies based on the concepts taught during the sessions. Each group will then present its findings/observations in class.

Modes of Evaluation: Quiz/Assignment/presentation/Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Discuss the fundamental concepts and business applications of HR Analytics	**PO1, PO2, PO6, PSO1**
CO2	Gain hands-on experience of developing metrics and dashboards for HR Teams of Organizations	**PO1, PO2, PO6, PO8, PSO1, PSO2, PSO3**
CO3	Understand applications of Machine Learning Concepts in HR Domain	**PO1, PO6, PO8, PSO1, PSO2**
CO4	Frame HR policies based on data-driven decisions	**PO1, PO2, PO7, PO8, PSO1, PSO2, PSO3**

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics and Governance	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Employability	Create capabilities of converting theoretical knowledge and data into practical applications with help of analytical tools and techniques.	Keep abreast of trans-disciplinary trends which can be brought to bear in creating strategic and tactical benefits in a VUCA world.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 03
BAN11018	HR Analytics	3	2	-	-	-	2	1	2	3	2	1

1= weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	

ADAMAS UNIVERSITY
SCHOOL OF BUSINESS & ECONOMICS
END SEMESTER EXAMINATION
Course: BAN11018 – HR Analytics

Program: BBA (Business Analytics) **Semester: VI**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from (Each Carrying 25 Marks). **This is an open book open laptop examination. You must submit your codes and outputs.**

1.	Case Study: Refer to the dataset 'Employees'- it contains demographic and service related information of all employees working in an organization Employees.csv (a) Import the file in R-Studio (b) Comment on the data structure (c) What is the average length of service of employees in the organization? Please do a deep-dive by Gender, Department, Age Group and Business Unit (d) What is the average duration of absenteeism in the organization? Please do a deep-dive by Gender, Department, Age Group and Business Unit	Applying	**CO1, CO2, CO3, CO4**
2	Case Study: Refer to the HR_JS dataset- it contains information on joining status of employees after they have been made an offer to join an organization. It has been noted that many individuals drop out at the last moment and do not join the organization-this results in loss to the organization on multiple fronts. The objective is to build a model for predicting the probability of joining status of employees to whom the organization has rolled out an offer. HR_JS.csv (a) Import the file in R-Studio (b) Comment on the data structure (c) Fit a Logistic Regression Model to predict the probability of a joining status of a new employee (target variable=Status_Joined) which is dependent on its given	Applying	**CO1, CO2, CO3, CO4**

	set of features (d) Report the intercept term, coefficients and the goodness of fit measures		

BAN11016	**MARKETING ANALYTICS**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	1	0	2	2
Pre-requisites/Exposure	Basic Business Analysis Skills, Marketing Theory Fundamentals				
Co-requisites	--				
Academic Year	2020-21				

Course Objectives

1. To understand the basic concepts of Marketing Analytics
2. To get acquainted with the tools and techniques used to perform Marketing Analytics
3. To gain an understanding of Customer Analytics and Digital Marketing Analytics
4. To measure the effectiveness of marketing analytics initiatives of an organization

Course Outcomes:

On completion of this course, the students will be able to:

CO1. Discuss the fundamental concepts of Marketing Analytics.
CO2. Develop an understanding of Customer Analytics.
CO3. Illustrate the importance of Digital Marketing Analytics.
CO4. Measure effectiveness of such initiatives.

Course Description:

The Marketing Analytics Course will enable students to understand customer behavior, build marketing strategies and identify in-demand metrics to effectively measure and optimize ROI. The course will help students to frame transformational marketing strategies and best practices in organizations.

Course Structure:

Unit I: Introduction to Marketing Analytics **8 L**

Why Marketing Analytics, Customer Funnel & Important Marketing Metrics, Getting started with Marketing Data, Marketing Data Collection & Data Discipline, Exploratory Data Analysis, Data Visualization, Data Storytelling

Unit II: Customer Analytics- Segmentation & Targeting 10 L

Segmentation Process, Clustering, Conjoint Analysis, Personalized Targeting, Predicting Potential Customers, Demand Forecasting, Predicting Customers for Upsell/Cross-sell, Predicting Churn, Predicting Customer Lifetime Value

Unit III: Digital Marketing Analytics 6 L

Digital Marketing Channel Mix, Social Media Analytics, SEO

Unit IV: Measuring Market Effectiveness 6 L

Testing Marketing Campaigns, Optimizing ROI, Interpreting Dashboards, Assessing Organizational Readiness for Marketing Analytics, Hiring & Building a Marketing Analytics Team, Overcoming Organizational Impediments

Text Book(s):-

1. Marketing Analytics: Data Driven Techniques with MS Excel, Wayne L. Winston
2. Marketing Analytics: Strategic Models and Metrics, Stephan Sorger

Project:

The class will be divided into Groups consisting of 5 members each. Each group will be given a topic/dataset which will analyze one real life scenario. They will have to analyze the case studies based on the concepts taught during the sessions. Each group will then present its findings/observations in class.

Modes of Evaluation: Quiz/Assignment/presentation/Written Examination
Examination Scheme:

Components	Mid Term	Class Assessment	End Term
Weightage (%)	20	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Discuss the fundamental concepts of Marketing Analytics	**PO1, PO2, PO6, PSO1**

CO2	Develop an understanding of Customer Analytics	**PO1, PO2, PO6, PO8, PSO1, PSO2, PSO3**
CO3	Illustrate the importance of Digital Marketing Analytics	**PO1, PO6, PO8, PSO1, PSO2**
CO4	Measure effectiveness of such initiatives	**PO1, PO2, PO7, PO8, PSO1, PSO2, PSO3**

		Domain Knowledge	Problem Solution	Leadership and Organization Skills	Ethics and Governance	Environment and Sustainability	Life-long Learning	Creativity and Innovation	Employability	Create capabilities of converting theoretical knowledge and data into practical applications with help of analytical tools and techniques.	Keep abreast of trans-disciplinary trends which can be brought to bear in creating strategic and tactical benefits in a VUCA world.	Develop competencies to be socially responsible business professionals.
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PSO 1	PSO 2	PSO 03
BAN11016	Marketing analytics	3	2	-	-	-	2	1	2	3	2	1

1= weakly mapped
2= moderately mapped
3=strongly mapped

Name: **Enrolment No:**	

ADAMAS UNIVERSITY
SCHOOL OF BUSINESS & ECONOMICS
END SEMESTER EXAMINATION
Course: BAN11016 – Marketing Analytics

Program: BBA (Business Analytics) **Semester: VI**
Time: 03 Hrs. **Max. Marks: 50**

Instructions:
Attempt All Questions from (Each Carrying 25 Marks). **This is an open book open laptop examination. You must submit your codes and outputs.**

1.	Case Study: Refer to the dataset 'Sales_by_Territory'- the objective is to do demand planning for each of the dealers of a consumer durable company by fitting a linear regression. Sales_by_Territory.csv (a) Import the file in R-Studio (b) Comment on the data structure (c) Fit a Linear Regression Model to predict the Sales Revenue (target variable) of dealers which is dependent on its given set of features (d) Report the intercept term, coefficients and the goodness of fit measures	Applying	**CO1, CO2, CO3, CO4**
2	Case Study: Refer to the Bank_Mktg dataset- it contains information on various products which are sold to bank customers. The objective is to build a model for predicting the probability of a customer subscribing a new product (Fixed Deposit) based on prior purchase behavior and other demographic features Bank_Mktg.csv (a) Import the file in R-Studio (b) Comment on the data structure (c) Fit a Logistic Regression Model to predict the probability of a customer subscribing to a Fixed Deposit (target variable=FD_Subscription) which is dependent on its given set of features (d) Report the intercept term, coefficients and the goodness of	Applying	**CO1, CO2, CO3, CO4**

	fit measures		

MGT11008	**BUSINESS STRATEGY & POLICY**	**L**	**T**	**P**	**C**
Version 1.1	**Contact Hours - 60**	3	1	0	4
Pre-requisites/Exposure	Basic knowledge on Functional areas of Management				
Co-requisites	Concepts of Management Functions				
Academic Year	2020-2021				

Course Objectives:

1. To explore concepts of Business strategy, Policy, and strategic management process.
2. The course will help to learn to frame Organisation's vision, mission, examine principles, techniques,
3. Students will be introducing models of organisational and environmental analysis, discuss the theory and practice of strategy formulation and implementation.
4. The course would enable the students to understand the principles of strategy formulation, implementation and control in organizations.

Course Outcomes

On completion of this course, the students will be able to:

At the end of the course, the student will be able to learn and practice:

Course Outcomes for Business Strategy & Policy (MBA 33106)

CO- 1 Understand the basic concepts and principles of strategic Business analysis the internal and external environment of business.

CO-2 Develop and prepare organizational strategies that will be effective for the current business environment.

CO-3 Devise strategic approaches to managing a business successfully in a global context.

CO-4 Basic understanding of the nature and dynamics of the strategy formulation and implementation processes as they occur in complex organizations.

CO-5 Develop students to think critically and strategically. Understand the nature of services, and distinguish between products and services.

Unit 1: Business Strategy: Introduction, Concept of Business Strategy, Need for Business Strategy, Essentials of Effective Strategy, Effects of Inadequate Strategies, Functions of Business Strategies 8L

Unit 2: Business Policy: Introduction, Definition of Business Policy, Factors influencing Business Policy, Business Policy vs. Strategy, Policy decisions and their impact on Business Strategies 8L

Unit 3: Strategic Management: Introduction, Strategic Management – Definition, Meaning and Role, Objectives of Strategic Management, Benefits of Strategic Management,Importance of Strategic Management, Causes for failure of Strategic Management 10L

Unit 4: Strategic Management Process: Introduction, Strategic Management Process, Strategic Vision and the role of a Strategist, Criteria for Effective strategy, Role of Strategic Management in Policy Making 8L

Unit 5: Strategic Analysis: Introduction, Strategic Analysis – definition, Need for Strategic Analysis & Environmental Scanning, Understanding environment of business for strategic analysis, Strategic thinkers & their contributions, Role of Strategic Analysis in Policy making 8L

Unit 6: Strategy Formulation: Introduction, Types of Strategies, Steps in Strategy Formulation, Core Competencies and their Importance in Strategy Formulation, 8L

Unit 7: Strategic Planning and Implementation: Introduction, Strategic Planning Process, Types of Strategies, Stability, Expansion or Growth, Mergers and Acquisitions, Activating Strategy, Issues in Strategy Implementation, Integrating the Functional Plan and Policies, 6L

Unit 8: Strategic Leadership: Introduction, Leadership Functions, Leadership Traits, Leadership Styles, Strategic Leadership and Competitive Advantage 4L

TH-1. Bartlett, C. A., Ghoshal, S., & Beamish, P. W. (2009). Transnational management: Text, cases & readings in cross-border management (6th ed.). London: McGraw-Hill

TH-2. Grant, R. M. (2010). Cases to accompany contemporary strategy analysis (7th ed.). London: John Wiley.

TH-3. Porter, M. E. (2004). Competitive strategy. (2004). New York: Simon & Schuster

TH-4. Prahalad, C. K., & Krishnan, M. S. (2008). The New Age of innovation: Driving co created value through global networks. New York: McGraw Hill.

Project:

The class will be divided into groups of five members each. Each group has to select an Organization. The project emphasis on Strategic analysis on the selected organizations. The group has to study SWOT Analysis , the different strategic implementation in the past and present. For the project student can use the sources like the company websites, interact with the company manager, interactions of the customers of the company concern and own experience with the company if any. The Project will be briefed in the 3rd session and required to complete by 30th session. After 15th session each group has to brief the progress of their project. After one week of mid semester examination all groups are required to submit the final report. Each group will be assigned a date for presentation. Ten marks for presentation and 10 marks for presentation.

Modes of Evaluation: Quiz/Assignment/ presentation/ extempore/ Written Examination

Examination Scheme:

Components	Mid Term	Attendance	Class Assessment	End Term
Weightage (%)	20	00	30	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and Pos		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Understand the basic concepts and principles of Business policy and strategic Business analysis the internal and external environment of business.	**PO1, PO 2**
CO2	Develop and prepare organizational strategies that will be effective for the current business environment.	**PO1,PO2, PO3, PO 6, PSO2**
CO3	Devise strategic approaches to managing a business successfully in a global context.	**PO2, PO4, PO 6, PSO1**
CO4	Basic understanding of the nature and dynamics of the strategy formulation and implementation processes as they occur in complex organizations.	**PO5, PO6, PO7 PSO3**

CO5	Develop students to think critically and strategically. Understand the nature of services, and distinguish between products and services.	**PO5, PO6, PSO2,POS3**

		Management Knowledge	Problem Solution	Leadership and Organization Skills	Ethics	Environment and Sustainability	Life-long Learning:	Creativity and Innovation	Prepare basic knowledge, skills, tools and techniques to enable them to take up	Development of entrepreneurial skillsandspirit.	Develop competencies to be socially responsible business professionals
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO 1	PSO 2	PSO3
MGT11008	Business Strategy & Policy	3	2	2	1	1	2	3	3	2	-

1= weakly mapped

2= moderately mapped

3=strongly mapped

Name: **Enrolment No:**				
Course: MGT11008 – Business Strategy & Policy **Program: BBA** **Semester: VI** **Time: 03 Hrs.** **Max. Marks: 50** **Instructions:** Attempt All Questions from **Section A** (Each Carrying 2 Marks); any **Four Questions** from **Section B** (Each Carrying 5 Marks)**.** Any **Two Questions from Section C** (Each Carrying 10 Marks)**.**				
SECTION A (Answer All Questions)				
1.	What is Core Competencies? Give examples of two companies and their core competencies.	Remembering	**CO1**	
2	How policy decision impacts on Business Strategy?	Understanding	**CO1**	
3	What is stability strategy? Which company do you think now adopting stability strategy?	Remembering	**CO2**	
4	What are five forces of Michael Potters approach?	Remembering	**CO1**	
5	Why are diversification strategy adopted?	Remembering	**CO1**	
	SECTION B			
1.	What do corporate strategies deal with?	Understanding	**CO2**	
2	What a vision should be and what it should not be?	Remembering	**CO3, CO2**	
3.	.	Understanding	**CO 3**	
4.	Analysis the strategy adopted by CCD.	Analysing	**CO3**	
	SECTION C (Attempt any **Two Questions**)			
1.	The Corporate journey of Mahindra Group started in 1945 when one of the two brothers K.C.Mahindra and J.C.Mahindara was on a visit to the US both brothers were professionals working with TATA Steel and Martin Burns	Applying	**CO4**	

	respectively. K.C.Mahindra visualized manufacturing jeeps for the rugged Indian roads. A franchisee for assembling willys jeep was set up as Mahindra and Mohammad in association with Ghulam Mohammad, who later become a finance minister in post-independence Pakistan. In 1848, Mahindra & Mahindra came into being Keshub Mahindra is the chairman of the Group and Anand G. Mahindra is the managing director. The first diversification came in 1953 when Otis Elevator (India) was formed in 1956, the shares of the Mahindra Group were listed on the Bombay Stock exchange. The decade of 1953 -63 saw diversification mainly through collaborations and joint ventures with foreign companies. The group entered Varnishes and resins, machine tools, sintered products, alloy and special steel, and finally tractors in 1963. Tractors remain a core business at the Mahindra Group and it is a market leader in the industry and a global player now. In 1965 came a major thrust into the automobile industry with the commencement of production of light commercial vehicle. The first international foray in the form of exports of utility vehicles and spare parts started in 1969, making in the first attempt at geographical diversification from the group. The next two decades till 1985 were interspersed with strategic actions aimed at expansion in its mainline business of tractors. A major diversification occurred in 1986 with the Group entering the information technology sector. The milestone of India's second liberalization in 1991 coincided with the Mahindra Group's diversifying into financial services. A reorganization exercise was carried out in 1994 to create six strategic business units: automotive, farm equipment, infrastructure trade and financial services, information technology and systech. The next five years the sawn of 2000			

	were marked by several related and unrelated diversification moves into realty and infrastructure, passenger cars, holiday resorts, consultancy and education. By 2001 the Mahindra Group was not really in a good shape financially with revenues of Rs. 4352 crore, net profit of Rs. 120 crore, and return on capital employed at 6.9 per cent. That made it embark on a financial reengineering plan, codenamed, Operation Blue Chip, involving debt restructuring, defining the financial criteria that each business in the Group had to meet etc. In the post 2001 period, the group has been focusing on internationalization through mergers and acquisition and joint ventures. The group has been operating in several markets around the world in Europe, Africa, South America, south Asia, South East Asia, and Middle East. Its earlier experience of having a joint venture with Ford was not happy. Now it is to be seen whether its joint venture with Renault of France and International Truck and Engine Corporation of the U.S. prove to be successful. Going by the popularity of its vehicles like Scorpio, it may well look forward to success. The Mahindra Group is a 60 year old widely diversified, US$4-billion group with 58 subsidiaries, 4 joint ventures and 9 associate companies. It business span a wide range of sectors, industries and markets, including trade and financial services, automotive technology, IT, infrastructure development and defense systems. Yet tractors and utility vehicle of its automotive and farm equipment are its core businesses. The logic behind some of the diversification may not be apparent – at least in the short run – but Anand Mahindra managing director defends the strategic posture by saying I see myself as a venture Capitalist and we have to constantly reallocate resources to newer ventures. a) How far Mahindra Group is effective in framing Corporate			

	strategy? b) How far Mahindra Group is effective in integration and diversification strategy?			
2.	Design a strategy for a premium restaurant looking at COVID- 19 situation in Kolkata.	Applying	**CO4**	
3.	Design strategy for Virus Protection Mass looking at more competition in the Indian market.	Creating	**CO5**	

MKT11007	**E-commerce**	**L**	**T**	**P**	**C**
Version 1.0	**Contact Hours - 30**	2	0	0	2
Pre-requisites/Exposure	Basic understanding of Internet technology, digital transactions and marketing				
Co-requisites	--				

Course Objectives:

1. Learn evolution of E-commerce- a brief history
2. Understanding e-commerce business models and technology background.
3. Building an E-commerce site, security and payment systems.
4. Online consumer behaviour, e-commerce marketing and business strategies.
5. E-tailing business models including service sectors.

Course Outcomes:

On completion of this course, the students will be able to:

CO1. Know about evolution of E-commerce history.
CO2. Understand e-commerce business models and technology background.
CO3. Build e-commerce site with knowledge of security and payment systems.
CO4. Recognise online consumer behaviour, e-commerce marketing and strategies.
CO5. Familiarise with the e-tailing business models including service sectors.

Catalogue Description

With the inception of Web, organisations and individuals are more and more making use of it to create new business ventures. The WWW is not only a definitive source of information, but an astounding business opportunity as well. People thoughout the world are venturing out onto the Web for buying and selling goods and services. The Web has indeed proved to be a boon to business, drawing its power from the flow of easy and instantaneous transactions worldwide. Online business is thriving and more and more corporate companies are joining the fray of electronic transactions. E-commerce has established a significant synergy between the use of digital information and online business. E-commerce has increased the speed and ease with which business can be transacted today, resulting in intense competition between enterprises. Companies are at the crossroads, with just two vistas ahead of them- either go online or go out of business. Once the choice of online business is made, further readblocks are encountered: which business model to adopt, what strategies to adopt to make business successful? The solution is to gain a deeper insight into the e-commerce business.

Course Content:

Module 1: 5 Lecture Hours

E-commerce: The revolution is just beginning, Ecommerce: A Brief History, Understanding E-commerce: organizing Themes

Module II 10 Lecture Hours

E-commerce Business Models, Major Business to Consumer (B2C) business models, Major Business to Business (B2B) business models, Business models in emerging E-commerce areas, How the Internet and the web change business: strategy, structure and process, The Internet: Technology Background, The Internet Today, Internet II- The Future Infrastructure, The World Wide Web, The Internet and the Web : Features

Module III 5 Lecture Hours

Building an E-commerce Web Site: A systematic Approach, The e-commerce security environment, Security threats in the e-commerce environment, Technology solution, Management policies, Business procedures, and public laws, Payment system, E-commerce payment system, Electronic billing presentment and payment.

Module IV 10 Lecture Hours

Consumer online: The Internet Audience and Consumer Behaviour, Basic Marketing Concepts, Internet Marketing Technologies, B2C and B2B E-commerce marketing and business strategies, The Retail sector, Analyzing the viability of online firms, E-commerce in action: E-tailing Business Models, Common Themes in online retailing, The service sector: offline and online, Online financial services, Online Travel Services, Online career services.

Reference Books:

1. Kenneth C. Laudon, E-Commerce : Business, Technology, Society, 4th Edition, Pearson
2. S. J. Joseph, E-Commerce: an Indian perspective, PHI

Modes of Examination: Assignment/Quiz/Project/Presentation/Written Exam

Examination Scheme:

Components	Internal	Attendance	Mid Term	End Term
Weightage (%)	30	00	20	50

Relationship between the Course Outcomes (COs) and Program Outcomes (POs)

Mapping between COs and POs		
	Course Outcomes (COs)	**Mapped Program Outcomes**
CO1	Know about evolution of E-commerce history.	**PO1, PO2**

CO2	Understand e-commerce business models and technology background.	**PO1,PO2, PO3, PSO1**
CO3	Build e-commerce site with knowledge of security and payment systems.	**PO1, PO2, PO3, PO4, PO5, PO4,**
CO4	Recognise online consumer behaviour, e-commerce marketing and strategies.	**PO1, PO5, PO7, PSO2**
CO5	Familiarise with the e-tailing business models including service sectors.	**PO11, PO12**

		A Brief History, Understanding E-commerce; organizing Themes	E-commerce Business Models	Major Business to Consumer (B2C) business models	Major Business to Business (B2B) business models	Internet and the web change business: strategy, structure and process	The Internet: Technology Background	The Future Infrastructure, The World Wide Web	Building an E-commerce Web Site: A systematic Approach	The e-commerce security environment	E-commerce payment system, Electronic billing presentment and payment.	The Internet Audience and Consumer Behaviour	Internet Marketing Technologies	E-commerce marketing and business strategies	The service sector: offline and online, Online financial services, Online Travel Services,
Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
MKT11007	E-commerce	3	2	2	1	2	1	-	3	2	-	2	2	2	3

1=weakly mapped
2= moderately mapped
3=strongly mapped

Model Question Paper

Name: **Enrolment No:**	ADAMAS UNIVERSITY PURSUE EXCELLENCE

Course: MKT11007 E-commerce

Program: BBA **Time: 3 Hrs.**

Semester: VI **Max. Marks: 40**

Instructions:

Attempt any five questions from **Section A** (each carrying 2 marks); **Three Questions** from **Section B** (each carrying 10 marks)**. Section C** is Compulsory (carrying 10 marks)**.**

Section A (Attempt **any Three)**			
1.	What is ubiquity of e-commerce?	**2**	**CO1**
2.	What is affiliate revenue model?	**2**	**CO2**
3.	What are B2C and B2B? Give examples.	**2**	**CO2**
4.	What is first mover advantage in e-commerce business?	**2**	**CO3**
5	What do you understand by successful e-commerce value proposition?	**2**	**CO4**
	SECTION B		
7.	Explain market opportunity and competitive environment of e-commerce business model.	**10**	**CO2**
8.	Explain a typical e-commerce transaction and its security threats.	10	**CO3**
9.	How do you plan to build your e-commerce presence? Explain	**10**	**CO4**

	SECTION C is Compulsory		
10.	Case Study on online consumer behaviour and marketing strategy	**10**	**CO5**